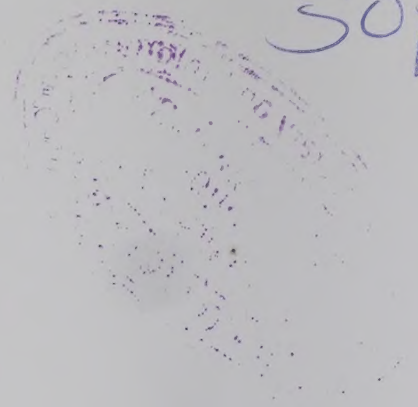




**TIME AND MOTION STUDY AMONG
FRONTLINE HEALTH WORKERS IN
ANDHRA PRADESH AND TELANGANA (2016)**

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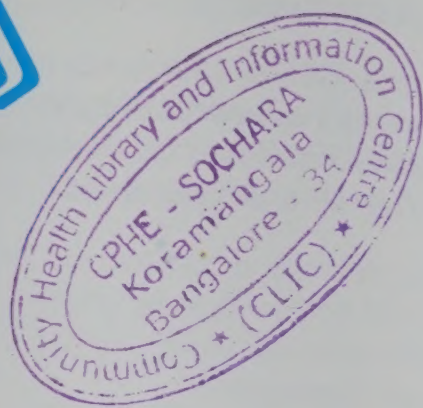
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Time and Motion Study among frontline health workers in Andhra Pradesh and Telangana (2016)

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This publication is a technical document for an empirical study. It has been prepared to add to the knowledge base of health systems and policy research and facilitate exchange of knowledge.

Division for Child Studies (DCS), Centre for Economic and Social Studies (CESS) with funding support from Reproductive and Child Health programme and Policy, Planning and Evaluation Programme, UNICEF Hyderabad Field Office for the states of Andhra Pradesh, Telangana and Karnataka had undertaken study 'Time and Motion Study among frontline health workers in Andhra Pradesh and Telangana.'

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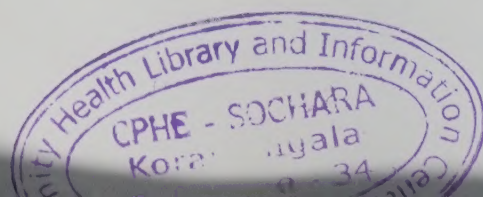
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SRIKAKULAM



PREFACE

TAM study report is an amalgam of insights gained from secondary literature available about frontline health workers (FLHWs), actual field study undertaken in selected districts of Andhra Pradesh and Telangana and various observations made during the process. TAM study report is an important value addition in the domain of health systems and policy research. The previous experience across several countries suggests that availability of adequate and appropriately motivated manpower is crucial to achieve Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs). In developing countries, however, manpower is often inadequate coupled with substandard performance. The Indian situation is no different especially when it comes to the most peripheral workers at the frontline, often in rural remote locations.

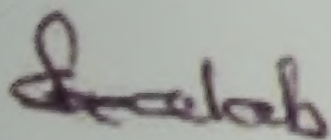
Based on this realization it was decided to undertake an empirical study titled '*Time and Motion Study among frontline health workers in Andhra Pradesh and Telangana*'. The report has conducted a detailed review of technical literature pertaining to time and motion studies of frontline health workers. A comprehensive section on methods covers various aspects related with study sample, setting, sampling, tools and techniques including human resource details of FLHWs including Auxiliary Nurse Midwives (ANMs), Multipurpose health worker – Male (MPHW-M) and Accredited Social Health Activists (ASHAs) at the state and district levels. A mix of qualitative and quantitative data from the field has been presented cadre wise spelling out inter-district variations, wherever applicable. Report concludes with key recommendations to policy makers, administrators and other stakeholders for effective time utilization by ANMs, MPHW-M, ASHAs and Anganwadi Workers (AWWs).

While the technical report encapsulates statistical data derived through time and motion observations undertaken with FLHWs and AWWs, through interviews it also tries to understand deeper aspects determining utilization of time by them in a particular manner.

Finally, this report aims to influence policies to make the functioning of FLHWs and AWWs more effective. The recommendations in this report are overarching and cover various other domains like governance, management, administration, which are related with overall functioning of the workers. The efforts put by the team at CESS with financial and technical support from UNICEF Hyderabad Field Office are highly appreciated for bringing out such a useful document which will help the state to include certain recommendations for effective functioning of FLHWs and AWWs.

With best wishes,

20 June 2016



Prof. S. Galab
Director,
Centre for Economic and Social Studies (CESS), Hyderabad

ACT	Artemisinin-based combination therapy
AP	Andhra Pradesh
ANC	Ante-natal check up
AWW	Anganwadi Worker
ASHA	Accredited Social Health Activist
ANM	Auxiliary Nurse Midwife
AWC	Anganwadi Centres
APVVP	Andhra Pradesh Vaidya Vidhan Parishad
CHC	Community Health Centre
CSO	Civil Society Organisation
CHNC	Community Health and Nursing Cluster
CDPO	Child Development and Protection Officer
DLHS	District Level Household Survey
DMHO	District Medical and Health Officer
FLHW	Frontline Health Workers
FGD	Focused Group Discussions
GNM	General Nursing Midwife
HRM	Human Resource Management
HRH	Human Resource for Health
HIC	High income countries
INAP	India Newborn Action Plan
ICDS	Integrated Child Development Services
ITDA	Integrated Tribal Development Agency
IUCD	Intra Uterine Contraceptive Device
IFA	Iron folic acid
IQR	Inter-quartile Range
JSY	Janani Suraksha Yojna
LIC	Low income countries
LMIC	Low and middle-income countries
LHV	Lady Health Visitor

ABBREVIATIONS

MDG	Millennium Development Goals
MPHW-M	Multipurpose Health Worker- Male
MPHA-F	Multipurpose Health Assistant-Female
MO	Medical Officer
NRHM	National Rural Health Mission
NVBDCP	National Vector Borne Disease Control Programme
NHM	National Health Mission
NHD	Nutrition and health Day
NACP	National AIDS Control Programme
NREGS	National Rural Employment Guarantee Scheme
PHC	Primary Health Centre
PHN	Public Health Nurse
PNC	Post-natal check up
RDT	Rapid Diagnostic Test
RBSK	Rashtriya Bal Swasthya Karyakram
RKSK	Rashtriya Kishore Swasthya Karyakram
RNTCP	Revised National Tuberculosis Control Programme
SPHO	Senior Public Health Officer
SDG	Sustainable Development Goals
SC	Sub-centre
TS	Telangana
TAM	Time and Motion
TB	Tuberculosis
UHC	Universal Health Coverage
UID	Universal Immunisation Day
WIFS	Weekly Iron Folic acid Supplementation
WDCW	Women Development and Child Welfare Department
WHO	World Health Organisation

KHAMMAM

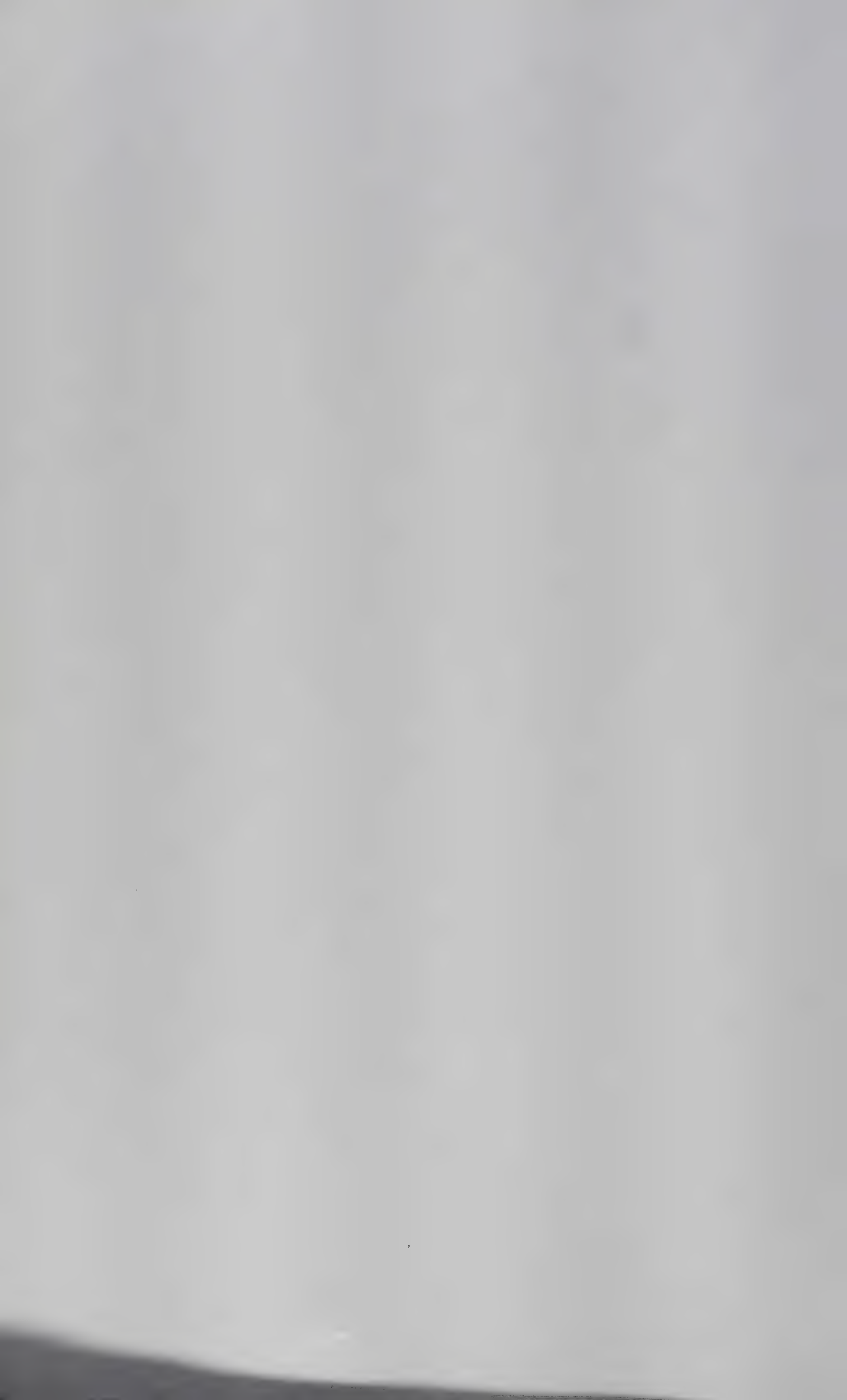
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వివేచి ప్రశ్న:

వినిపిస్తూ ఉన్నాయి:







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BACKGROUND

Frontline health workers (FLHWs) are crucial for any health system to succeed as they are the ones who being at the grassroots implement the programmes and deliver the required care. On one side public health managers realise that the FLHWs do not work properly and are underutilised while on the other side FLHWs feel that, day in and day out, with introduction of newer health programmes and initiatives, new activities are added to their job responsibilities. All this is in the given situation of higher patient load amidst acute on the ground shortage of manpower.

The National Health Mission (NHM) brought in the provision of two Auxiliary Nurse Midwives (ANMs) for every sub-centre to reduce the burden on one ANM and to strategically share the work between the two to increase the coverage and service delivery at the Sub-centres (SCs). The introduction of Accredited Social Health Activists (ASHAs) in 2005, through the National Rural Health Mission (NRHM), was aimed towards facilitating the community outreach and enhancing beneficiary coverage. Emphasis was laid on enhanced co-ordination between the ANMs, ASHAs and Anganwadi Workers (AWWs) in order to decrease work duplication; enhance coverage and outreach through regular coordinated planning. It was envisaged that the Multipurpose Health Worker - Male (MPHW-M) would be closely involved in various disease control programmes and health hygiene related service delivery components. On the ground, they are hardly any postings except for a few of the SCs. There have been no new fresh recruitments in this cadre in the last few years. However, based on the epidemiological needs of the population and increased emphasis on communicable and non-communicable disease programmes, the MPHWs-M role may be redefined.

There are only a few studies that have attempted to study the work load of FLHWs and their time utilisation in an Indian context, especially after the provision of the 2nd ANM and ASHAs and the depleting MPHW-M workforce. Hence in this context, UNICEF (Field Office for Andhra Pradesh [AP], Telangana [TS]), Karnataka) called for the conducting of a Time and Motion (TAM) study across selected districts of AP and TS.

TAM study aimed to analyse the amount of time FLHWs (ANMs and MPHWs-M) and AWWs spend on specific activities as per their job description, the time consumed in the travel during day-to-day activities and physiological impact of the work environment upon them. The study attempts to look into some crucial aspects like what is the performance of FLHWs, does the work schedule need to be better planed or do the job responsibilities of each of the cadres need to be revisited in order to enhance their overall work performance. This in turn is believed to direct more concerted policy level implications with respect to the functioning of FLHWs. ASHAs were also involved in the study through group discussions to understand their role in service delivery.

This study is the first of its kind which used mixed methods and studied all the cadres working at the grassroots level for the health and nutrition status of the rural communities. The study helped in gaining a holistic understanding about the service delivery by grassroots cadres, respective role of the FLHWs, co-ordination between them, and most importantly exploring the facilitating and debilitating factors and mechanisms through which they operate in the domains of inter-personal, community and health systems.

METHODS

The TAM study is a mixed methods study with the '*time and motion*' approach. The study was conducted across three randomly selected districts from Andhra Pradesh (Srikakulam and Chittoor districts) and Telangana (Khammam district).

Each of the sample districts was stratified into clusters – tribal clusters and non-tribal clusters and one cluster of each type was randomly selected. However Chittoor did not have a substantial tribal population, thus two tribal and four non-tribal clusters were selected. From each of the clusters, one PHC was randomly selected followed by the purposive selection of four SCs from the list of SCs within each selected PHC. The SCs which had the most the cadres (to be studied under TAM) in position were identified first and among them based on increasing order of distance from PHC, one farthest SC, one closest and two SCs with intermediate distances were selected. In total 12 SCs which had the required cadre of participants posted (1st and 2nd ANMs, MPHW-M) were purposively included in the study across all the three districts. Two Anganwadi Centres (AWCs) were also selected within each PHC area: one being in the SC closest to the PHC while another falling in the SC area farthest from the PHC. This kind of selection of facilities/centres was done in order to factor in variations which were both at the population and geographical terrain level.

The TAM study comprised of a total of 61 FLHWs and AWWs (43 ANMs, 6 MPHW-M, and 12 AWWs), six FGDs with ASHAs and one FGD with ANMs, and 33 interviews with officials.

The quantitative method (direct continuous observation) was used to study the time utilisation and work patterns of FLHWs and AWWs. A comprehensive observation tool was developed after an extensive exploratory exercise with an inductive approach. This was to understand job-responsibilities and service delivery by FLHWs and AWWs through repetitive direct observations, interviewing supervisors, consulting with experts and the workers themselves. Once the tool was finalised after two rounds of pilot studies, a software app was developed and GPS enabled Android tablets were used for recording time utilisation for specific broad and sub-categories of activities. For qualitative data collection, pre-tested and piloted semi-structured interview guides and appropriate FGD guides were developed for each of the cadres. Qualitative methods (interviews and FGDs) were used to understand the facilitative and debilitating factors affecting FLHWs, AWWs and ASHAs. Interviews also helped to understand specific reasons for their pattern of time utilisation. Interviews explored the perceptions and suggestions from the health department and Integrated Child Development Scheme (ICDS) officials. Qualitative methods enabled to contextualise the quantitative findings and understand them better.

Representativeness of the study

The three districts and six clusters within were selected to represent each of the regions of the two states and both tribal and non-tribal areas. The sample taken in the TAM study may not be statistically representative but qualitatively it gives deep insights which are representative and helps in detailed understanding about the working of FLHWs and AWWs. The insights gained across six sample PHCs and 24 SCs was quite varied with respect to human resource positioning (in terms of filled and vacant positions of 1st ANMs, 2nd ANMs and MPHWS-M). Consequently, the quantum of work and pattern of activities also varied. SCs under the study presented a scenario where both the ANMs and MPHWS-M were posted to a SC and where only one ANM was posted. Thus, the results of this assessment shall be accepted with an understanding that this is amongst the better state of affairs with a Hawthorne effect as displayed by the workers during observations. *The study certainly presents a scenario where FLHWs and AWWs were probably working at their best with the given team in place and under close observation.*

TIME AND MOTION STUDY FINDINGS FOR FLHWs

ANMs: Of the total 43 ANMs, 21 were 1st ANMs and 22 were 2nd ANMs. Of the participating ANMs, 55.8 per cent were in the age group of 25-35 years and these were all 2nd ANMs. All the ANMs had met the minimum criteria of high school and ANM training course. 48.8 per cent ANMs had passed intermediate (with science) and four ANMs out of the total had studied till graduation or beyond. Across the study districts only five ANMs of the total reported to be living in quarters attached to the SC.

Through the TAM study it emerged that on a typical day of work ANMs spent median **8:04 hours from their home to home (Inter-quartile range IQR, 7:18 - 8:49)** (including service delivery and total travel). *8:09 hours were recorded in non-tribal PHCs and 7:58 hours were recorded in tribal PHCs.* If travel time from home to work place (field or facility) and back is excluded, ANMs spent median **7:04 hours on the job (IQR, 6:08 - 7:31).** *7:10 hours were spent in non-tribal PHCs and 6:20 hours were spent in tribal PHCs.* Of which median **1:02 hours were spent on within field travel** thus ANMs spent *6:06 hours in non-tribal PHCs and 5:01 hours in tribal PHCs on service delivery.* Average and median working hours were more on Wednesdays (Immunisation Day) and Thursdays (Field Outreach Day and School Health Day) and least on Fridays and Saturdays.

On any given day ANMs travelled more than two hours per day, which actually left them with a limited amount of time for the day's activities. Half of the time was spent on travel from home to the work place (field or facility) and back and the other half in travel to the field and within the field. Many a times, to save time, the ANMs went directly to the field from home rather than going to the SC or PHC and then the field. It was observed that ANMs in tribal areas, due to safety concerns and rainy weather (monsoons had set in, in the tribal cluster of Srikakulam at the time of data collection) left their centres early. The ANMs from tribal areas also travelled about 40 minutes longer from home to the place of work and back. In the sample PHCs located in **tribal clusters**, ANMs effectively got only median 5:01 hours per day for programmatic and programme supportive functions including time incurred in waiting and personal work. However, in the sample PHCs in the **non-tribal clusters**, the ANMs had median 6:06 hours of time for work which was 1:05 hours more than the ANMs in the tribal cluster. Within the field, the travel time (median) incurred was the same for tribal and non-tribal PHCs. This was despite the fact that field locations in one of the tribal PHCs, were located in extremely hilly and inaccessible terrain (tribal cluster PHC from Srikakulam). This suggests that ANMs travelled for only a certain period of time (irrespective of the terrain) and the villages far from the Centre and difficult to reach are either missed or require a whole day's dedicated time to capture.

For **1st and 2nd ANMs** median time spent on the job per day was almost equivalent (6:54 hours and 7:09 hours respectively). Median time spent on within field travel was also similar for 1st and 2nd ANMs (0:57 hours and 1:07 hours respectively).

Category and sub-category of activities: The ANMs job work was studied across three domains, 1) Programmatic (included time spent in direct service delivery, records maintained and travel time to and in the field) 2) Programmatic support (included time spent in meetings, trainings, non-health but work related tasks, administrative work etc) and 3) Others (included time spent in waiting, personal work, other uncategorised domains).

The ANMs spent 60 per cent of their on-job time on **programmatic activities** in a week - median 22:38 hours (IQR, 20:48 – 27:01) in a week. The range of time spent varied from 12:22 hours to 39:28 hours in a week on programmatic activities. Such extreme variation specially the lower 25 per cent is of concern as this has direct impact on the health services accessible to the populations from the respective SCs.

In a week only median 9:46 hours (IQR, 7:19 – 14:32) were spent on direct service delivery. Median time spent was more on Wednesday, Thursday and Saturdays. These three days were core service delivery days wherein universal immunisation was organised at SCs on Wednesdays, school health along with field outreach on Thursdays and Saturdays involved Nutrition and Health Day (NHD) along with field outreach. Reports and records maintenance was more on Mondays and Tuesdays. During the whole observation week we found that ANMs had different patterns of activities under direct service to beneficiary. The top five activities were a) home visits, b) seasonal diseases/epidemics/outbreaks control work, c) universal immunisation d) school health and e) maternal health. However, out of 43 ANMs only 42, 34, 30, 27, and 24 ANMs respectively performed these activities. In terms of time spent, apart from Universal Immunisation Day (Median, 257 minutes in a week) and home visits (Median, 200 minutes in a week), time spent on other vital components of ANMs' direct services to the beneficiary category was much lower, almost negligible in a few of the cases. Due to multiple tasks to be performed in a restricted time along with vacant positions and other challenges it is but obvious that each of the sub-categories of activities like adolescent health, child health, communicable diseases, NHDs, family planning etc got a small share of the ANMs' time, often sub-optimal to provide holistic services and benefit the beneficiaries.

In tribal PHCs, the ANMs spent much less time in programmatic activities including direct service delivery compared to ANMs in non-tribal PHCs and within that too most of the time was spent on home visits and travel within the field. First ANMs and 2nd ANMs had clearly demarcated their geographical areas and each one of them performed a similar set of activities in their responsible areas. The only major variation was for communicable and non-communicable diseases where a larger number of 2nd ANMs were involved. ANMs spent median 7:01 hours in a week (IQR, 4:21- 9:16) in maintaining records and reports. On observation it was seen that ANMs were maintaining various kinds of registers which amounted to a total of 18 in number. The main challenges faced by ANMs in records maintenance were 1) Large number of records and registers with many columns which only duplicated information 2) Unfamiliar format of certain reports and formats which are sent on urgent basis from the *Mandal* or district level with requests for immediate revert back. This compromises the otherwise planned activities for the day.

In the domain of **programmatic support activities**, median time spent by ANMs was 8:38 hours (IQR, 5:40 – 11:20) which was almost one third of time spent on programmatic activities. All 43 ANMs were observed utilising their time in meetings/discussions with co-workers or the village community. However, multi-tasking was common, as observed by the field data collection team. The ANMs were often involved in meetings/discussions with co workers or the village community during their overall travel as well. For ANMs, work planning through ATPs was a very intricate aspect of their daily routine functioning. ANMs clearly acknowledged that ATPs enabled them to plan and manage their time better. The top five factors facilitating the ANMs work planning were identified as 1) Supportive supervision comprising of problem solving by supervisors. 2) Support from supervisors in accomplishing work tasks. 3) Support from co-workers like AWWs and ASHAs. 4) Community support received from village groups, leaders, youths, SHGs, village elders and community at large. 5) Presence of MPHWS-M.

Upon studying the sample work plans of the participant ANMs, it clearly emerged that there was no uniform format to prepare ATPs nor was there any activity wise listing for service delivery. The majority of the plans mentioned the number of households and populations to be covered location wise. The UID and ANC check up emerged as the two main activities. Additionally availability of completely updated house-listing from ASHAs and AWWs would have had enabled ANMs in better planning which was not the case as observed in the field.

Following the TAM observations, the same set of ANMs were also interviewed in order to contextualise the observations made. A FGD was also conducted with the ANMs (different set from non-sample SCs of sample PHC) based on emerging trends from the qualitative data analysis. For ANMs, the concept of time management was very abstract and clearly signified only in terms of the different set of activities and corresponding time utilisation in a week. The ANMs expressed that the following five activities consume most of their time in a week in descending order 1) Immunisation 2) Home visits comprising mainly of ante-natal/ PNC women, child health follow ups 3) Seasonal diseases/epidemics/outbreaks related surveys, identification work etc. 4) Records and reports 5) Maternal health i.e. ANC clinic. The TAM observations of the ANMs had similar findings and showed that ANMs were well aware of their planning and service delivery patterns. Through interviews it was found out that a mix of interpersonal and community related factors act as enabling factors for ANMs in the effective management of time. The top five **enabling factors** were community support, co worker support, family support and health system related factors like transportation enabled (staying closer to health facility, bus facility being available, possessing own vehicle, husband dropping them daily for work etc.). Interestingly, transportation (unavailability of public transport, difficult to reach terrain with no or *kachha* roads etc.) also emerged as a common **challenge** across districts in the effective management of time for ANMs. There were a few other district specific challenges with a mix of interpersonal, community related and health system related factors like lack of community support, family support, and co worker's support, ill health, climatic conditions (hot sunny days and monsoons which were more of a challenge because of the hilly terrain of Srikakulam's tribal cluster PHC), meetings (sudden unannounced nature, long duration, and timings coinciding with routine tasks), other tasks (surveys, outpatient duties or pharmacy work at PHC etc.), vacant positions, poor infrastructure (lack of government owned buildings, maintenance of buildings, availability and functioning of equipment), carrying heavy vaccine kits, records maintenance etc.

As shared by ANMs, trainings become an important factor for them in accomplishing their tasks effectively and accurately. ANMs expressed the need for periodic refresher trainings with hands on exposure and on-job trainings with the support of supervisors. ANMs strongly expressed the need to be trained in some key technical areas. These were related with communicable diseases identification and testing, Haemoglobin testing, information about new health programmes and initiatives introduced, online mother and child tracking (MCTS), records maintenance, maternal and child health related aspects, about immunisation, adolescent health, non-communicable diseases like diabetes testing and identification, emergency medical and obstetric care (EmOC) to manage critical emergency cases etc.

A significant probe was also made with reference to ANMs work support and coordination with other co-workers from the health department (i.e. other ANMs, MPHWS-M, ASHAs etc) and ICDS Scheme (i.e. AWWs). The findings were indicative of direct work support between the 1st and 2nd ANMs. The ANM pair operated in coordination to provide health service delivery through 1) Sharing work tasks. 2) Demarcation of work in terms of villages to be covered, but the nature of field work remains the same for both ANMs in their areas. 3) In the situation of multi-tasking for example on Immunisation Day while the 1st ANM was engaged in filling up records and talking to beneficiaries, the 2nd ANM was engaged in immunising children with support from the ASHA. 4) ANMs maintained records individually for their tasks and respective population. . Upon being asked about coordination with MPHWS-M, ANMs did feel that the support of the MPHWS-M and coordination with him was crucial for their work, but most of the MPHWS-M positions were vacant. However, in Srikakulam's tribal cluster PHC this support and coordination was largely visible and described by the ANMs as well. The ANMs also acknowledged that the presence of ASHAs was vital for their functioning in various significant ways like connecting with the community and mobilising them to avail health services; bringing firsthand information about new cases, health status of the community and births and deaths

in the village; liaising with village leaders and PRI representatives; and support during home visits, special drives and event days like surveys, NHD, Immunisation Day etc.

AWWs are another important cadre with whose help ANMs execute health delivery functions in the villages. The ANMs actually counted upon the support received from the AWWs and coordination with them in the following key areas. 1) Community mobilisation. 2) Coordination with ANMs through ASHAs. 3) Identification of new cases (ANC women, children to be immunised, PNC women, eligible couples, individuals suspected to be affected with seasonal diseases, HIV, Leprosy etc.). 4) Support during special events and days like Pulse Polio, NHD, village level surveys. 5) Health education and awareness building.

Another crucial aspect that emerged through the TAM study was the impact of physical health on the daily functioning of ANMs. Through various field level narratives from ANMs it emerged that the strenuous nature of the ANMs' work, especially during field days, which sometimes involves miles of walking, physical health conditions does impact their work in a variety of ways. The perpetual state of illness and needing to accomplish routine work as ANMs is a daunting task for them.

Summing up: ANMs struggle with their work plans and find it hard to stick to them due to various disruptions mostly on account of the varied requirements from the department. It is important to note here that what they refer to as a work plan is not really a work plan and there is no standard format and guidance available to maintain the same. They have several programme activities but how these should be aligned to their day to day work is not well understood. ANMs already spend a good seven hours on the job without specific lunch breaks, thus the findings here are closer to what we can expect from them. ANMs touch upon several activities but the time spent is sub-optimal to be able to deliver holistic care in all. The tasks provided to them are both demanding and challenging and with the given education, selection and recruitment criteria, training and supervision status, unless the health department simplifies or reduces the tasks, helps in systematic bottoms up planning, keeps slots for other unplanned activities in the plan with routine follow up of work plans, ANMs would find themselves becoming overburdened rather than an efficient workforce. As observed by the field team and shared by ANMs, on the job periodic hands on training, quality of supervision provided, work coordination with ASHAs, MPHWS-M and AWWs, non-financial incentives like motivation, stringent selection and recruitment criteria with job oriented tests can actually enable ANMs to utilize their time better and perform efficiently in their daily tasks.

MPHW-M: One of the six MPHWS-M was aged below 25 years of age while the remaining five were mostly in their 30s. Five of the six had completed their graduation while one had finished his post-graduation. Since there was no provision for stay of MPHWS-M in the SC quarters all of them were residing in locations away from the SC. Five of them had their own vehicle for travel.

TAM observations of MPHWS-M revealed that the median 7:55 hours (IQR, 5:48 – 9:47) were spent from home to home in a day during the 35 MPHW observation days. They spent about three hours on travel on any day. Travel from home to the workplace and back to home took median 1:51 hours (IQR, 0:52-2:42) and within field travel took median 1.16 hours (IQR, 0:48-1:41) on a day. Thus, the MPHW-M spent only median 5:44 hours (IQR, 4:07-6:57) on job and excluding the within field travel they spent only median 4:16 hours (IQR, 2:21-5:37) on actual work.

The top three categories of activities of the MPHWS-M which consumed the maximum time on an average in a week at the time of data collection were 1) Travel to and within field. 2) Direct services to beneficiaries (mainly seasonal diseases related control work). 3) Meetings/discussions with co-workers or village community.

MPHWS-M spent median 16:30 hours on **programmatic domain** activities and average time of 14:45 hours in a week (minimum 9:43 hours and maximum 29:38 hours), which is about 56 per cent of the average time spent on job in a week. During week days higher median time was spent on direct service delivery on Friday followed by Tuesday. Records and reports maintenance was mostly done on Monday (Median, 1:10 hours) while on other days median time spent was zero minutes to 12 minutes only. MPHWS-M travelled to the field every day with maximum travel noted on Friday followed by Tuesday.

As revealed through data, home visits, UID and school health consumed the maximum time of MPHWS-M during the observation week. MPHWS-M spent median 2:06 hours during home visits which is almost half of their time spent on service delivery. Four of six MPHWS-M were from the tribal cluster PHC of Srikakulam (04) and as observed and reported by ANMs, because of remote inaccessible locations, hilly terrain and scattered tribal habitations, MPHWS-M took the lead in visiting distant locations in the field. Thus they spent more time on travel within field and imparting services via home visits.

Universal Immunisation Day and school health were other key areas where MPHWS-M supported ANMs in carrying vaccine kits to the health facility, and helped in immunisations, health checkups of school children and other key activities. Median 31 minutes in a week were spent in control of seasonal diseases/epidemics. It mainly involved detection of suspected cases of malaria and slide preparations for the same.

On **programmatic support activities** MPHWS-M spent median 4:57 hours and average 5:12 hours per week (minimum 3:53 and maximum 9:32 hours) which is about 23 per cent of average time spent on job in a week. Here, MPHWS-M spent much of their time in meetings/discussions with co-workers or the village community and with seniors. However, as observed during observations, this was not necessarily work related and could certainly be minimised.

Much of the MPHWS-M's time was spent in the category of **others** (median 6:04 hours). An average of 5:50 hours which is about 23 per cent of average time spent on job in a week. MPHWS-M's spent more time on personal work and other uncategorised work and observers felt that this time could be utilised on services to beneficiaries through better work planning, task allocations and follow ups.

Through interviews with MPHWS-M it was found out that a mix of interpersonal and community related factors act as enabling factors in the effective management of time. The top five **enabling factors** were co workers support, transportation, community support, understanding of locally spoken language/dialect, and availability and regular supply of stock material. There were also certain key **challenges** to the effective management of time, such as, monsoon conditions making field outreach even more difficult, hilly and remote locations, sudden meetings of long duration, transportation to inaccessible habitations with no/or *kaccha* roads, absenteeism from work which may be intentional or unintentional. With special reference to work planning, MPHWS-M found sudden meetings, public health emergencies like epidemics, unavailability of villagers because of seasonal/agricultural work and other non-health related work tasks major challenges. MPHWS-M acknowledged the significance of coordination with the 1st ANMs and 2nd ANMs at work.

MPHWs-M were asked to share the areas in which they felt the need to be trained. The key areas which emerged were 1) New health programmes 2) Child health 3) Computer training 4) Haemoglobin testing 5) Chlorination 6) Diabetes testing 7) New drugs usage 8) Immunisation 9) Technical knowledge about various components related with their daily service delivery.

Summing up: MPHWS-M spend less time on the job and are often unsupervised. They think that they have limited work to do and that is the impression of the officers at the district and sub-district too. It clearly emerged that there is no well defined job description for MPHWS-M and thus no fixed work plan. As a result, it was observed that, the MPHWS-M time is consumed in activities on a need to basis or in administrative jobs which can be better utilised for core service delivery.

Wherever MPHWS-M are in position, they are not being utilised to their full potential however they have been useful in seasonal disease control programmes which is largely because the cadre was initially conceived of as 'Malaria workers', and in community mobilisation and rapport building. It was observed that MPHWS-M provided good support to ANMs, especially in getting drugs and vaccines and accompanying them to hard to reach, often unsafe, areas. This, now near obsolete, cadre could be of great benefit in co-ordinated service delivery along with ANMs and can take the lead in communicable and non-communicable programmes, programmes related with adolescent health, health education for preventive and promotive care provided this cadre is appropriately managed with logical and well-planned distribution of responsibilities with routine follow up. The MPHWS-M positioning can be of great significance in hard to reach terrains and tribal populated clusters. This will eventually contribute to increasing the efficiency of the health system through better management of the workforce.

FACILITATIVE FACTORS AND BARRIERS TO ASHAs

As a study strategy ASHAs were not covered under the TAM observations, instead FGDs were undertaken with them in order to identify key factors that facilitated them and those that acted as barriers. During the FGDs, ASHAs listed their key roles and responsibilities as 1) identification and registration of ANC women. 2) Referral (of ANC women and suspected cases of particular diseases). 3) Accompanying patients (including ANC women). 4) Community mobilisation, awareness building and motivation. Reducing maternal and child deaths and diseases was accepted as a common responsibility by all the ASHAs of the three districts.

Home visits in general took up the maximum amount of the ASHAs time. During home visits ASHAs accomplished activities mainly related with maternal health i.e. follow ups of ANC and PNC women, basic curative care to those in need, follow ups in general i.e., for DOTS patient, health education, and motivation etc.

Across the three districts it emerged that ASHAs received varying amounts of incentives for activities mainly related with maternal and child health like completion of ANC check-ups, immunisation doses to children, accompanying delivery cases to health facilities, mobilisation activities like '104 Service Day', family planning operations, NHDs, ASHA days etc. However, the timely payment of these incentives was an issue on the ground. ASHAs also mentioned a few non-incentivised activities too like de-worming, blood smear preparation etc.

ASHAs found three key factors **facilitative** to their work functioning 1) Sense of community service and responsibility for villagers health. 2) Support from the community. 3) Support from co workers like ANMs and AWWs. Interestingly ASHAs highlighted all interpersonal and community related factors as facilitative to their work, but none of the health system related factors. ASHAs also spoke about the key **challenges** to their work, common across three districts, which were a mix of health system, inter-personal and community related factors for e.g., 1) Accompanying patients during emergency cases especially at night and with no accommodation available for ASHAs at the health facility. 2) Community resistance and lack of support. In Srikakulam, ASHAs clearly identified difficulty in travel, no regular income and local (tribal) community beliefs, as challenges. In Chittoor, the lack of family support and local community beliefs emerged as major challenges. Both in Khammam and Chittoor, the lack of ASHA drug kits prevented ASHAs from catering to immediate curative care needed by the villagers.

During the FGDs, ASHAs came up with key suggestions to improve their work performance. 1) On time payment of incentives and fixed monthly base salary. 2) Providing allowances for travel, stationery etc. 3) Providing accommodation while accompanying patients or an allowance to manage their stay and travel. 4) Promoting eligible and qualified ASHAs to ANMs after training. 5) Regular supply of ASHA kits. 6) Strengthened involvement in village health, sanitation and nutrition committees.

Summing up: ASHAs appeared satisfied and motivated about their work however, they require better non-financial incentives in terms of recognition from the health system and respect from the community. Community rapport can be certainly strengthened through soft skills development for ASHAs which would in turn help them to connect better with the community and involve various key stakeholders including Panchayati Raj Institutions (PRIs). In the absence of any monetary (allowances) and systems support (like provision for accommodation at health facilities) they find it difficult to accompany pregnant women to hospitals for deliveries especially in case of complications at night. They share crucial co-ordination with ANMs and AWWs and appreciate the support received from them. Some ASHAs were visiting SCs more often than the desired one day in a week and also complained of the delays in receiving incentives. A robust mechanism for reporting and disbursement in the system can certainly ensure on time payment of the ASHAs incentives. Periodic hands on training of ASHAs based on ASHA modules and emergent needs from the community can enable ASHAs to perform their daily tasks better.

TIME AND MOTION FINDINGS FOR AWWs

Three of the 12 AWWs were aged above 45 years; four were aged between 35-45 years while five were aged 30 years. Out of all the AWWs only one was educated below high school. Out of the 12 AWWs, only two had received computer training (one each from Srikakulam and Khammam). Ten AWWs resided in the same village and walked to the AWC while two AWWs, one each from Srikakulam and Chittoor, travelled from nearby villages by bus to reach AWC.

The TAM observations of the AWWs demonstrated that median 6:50 hours (IQR, 6:14 – 8:06) in a day were spent on the job during 70 AWW observation days and median 0:17 hours (IQR,

0:08 – 0:50) were spent in travel from home to the AWC and return in a day. Within the field travel was negligible. Two AWWs were staying in a different village from where the AWC was located. There were two AWWs from hilly terrain and, usually, the helper travelled up the hill to distribute supplementary nutrition and carry home rations to beneficiaries who had missed the service.

AWWs spent median 20:56 hours on **programmatic domain** of activities in a week. On an average AWWs spent 15:59 hours in a week on direct service delivery to the beneficiaries, 3:03 hours on records and reports maintenance and 1:42 hours on in field travel.

As the data revealed, AWWs provided only two activities for more than 90 per cent of their time spent on direct service to beneficiaries- Early Childhood Education (ECCE) and Pre-school Non-formal Education (NFE) (median, 11:18 hours), and supplementary nutrition programme (median, 3:05 hours). However, observers reported that though ECCE/NFE took up the maximum time of the AWWs, the quality of the same was uncertain. In a few of the AWCs, ECCE/NFE has been mainly restricted to a few action songs which very few children actually follow.

One AWW was observed to be involved in school health activities along with the ANM on a Friday. In the category of records maintenance, almost all her time was spent on maintaining various kinds of registers, many of which were introduced with the changes in programmes. Like in the case of the workers from the health department, here too very little time was spent in maintaining beneficiary records, which is important for routine follow ups and keeping track of the health and nutrition related status of beneficiaries from the community.

In the **programmatic support domain**, median time spent by AWWs was 6:16 hours in a week. It emerged that AWWs spent more time on personal work and other uncategorised work which could be utilised on services to beneficiaries or records maintenance.

The TAM study significantly helped in understanding the key enabling and challenging factors in the effective management of AWWs time. The AWWs identified five key factors which **facilitate** the management of their time 1) Community support. 2) Co workers support. 3) Family support. 4) Location of residence being closer to AWC which in turn helped in saving travel time. 5) Work planning in terms of time table received from the seniors enabling them to identify their tasks, prioritise and execute them based on the field requirements. There have been certain key factors which posed **challenges** to the AWWs in the effective management of their time such as: 1) Other tasks such as election duties /surveys which are at the cost of AWWs' regular duties. 2) Records maintenance especially when these are asked for suddenly by the higher authorities. If not submitted then the AWWs are reprimanded for the same. The AWWs were found to maintain at least 13 different kinds of registers and various other reports. 3) Sudden unannounced meetings of long duration which either led to the AWC activities being stopped if there was no helper posted or the AWWs regular functions like ECCE/NFE etc., were compromised. 4) Poor infrastructure. 5) Beneficiary unavailability because of distance, involvement of parents in agricultural field/labour work, lack of awareness etc. During the interviews, AWWs did accept that their physical health conditions impacted their routine functioning in the AWC and in the field.

The AWWs mentioned a range of areas in which they felt the need to be trained such as, 1) Conducting ECCE. 2) Maintaining various kinds of records. 3) Computer training. 4) Specific knowledge building sessions on health and hygiene, nutritional services and maternal health. 5) Technical skill base for growth monitoring.

Summing up: The AWWs spent most of their time on child education and supplementary nutrition, along with records maintenance. Though AWWs conducted activities related to pre-school child education it was observed, that the quality needed to be improved significantly. AWWs struggled to do the job comprehensively using teaching aids and other teaching methods. Understanding of the curriculum designed at the state level and the AWWs found it a challenge to deliver the same to the children. AWWs found it difficult to manage records and often carried them home where their husbands or family helped them. With the given education status, AWWs require continuous supervision and technical support to help them develop the desired skills and deliver tasks. Their involvement in adolescent health and other health related programmes seemed minimal which could certainly be improved through village level planning along with ASHAs in the presence of ANMs and follow up by supervisors from both the departments. AWWs provided good support to ANMs and ASHAs during camps and NHD days which in itself demonstrated their significance for the health and nutrition of beneficiaries.

STUDY FINDINGS FROM OFFICIAL INTERVIEWS

Note: During the observation period, the Department of Health and Family Welfare conducted the Mission Indradhanush activities in Khammam and trainings for use of tablets for online tracking of mother and child (MCTS) in Chittoor District. These would have affected the routine work plan of the FLHWs. It is common knowledge that such activities keep happening and directly impact the FLHWs routine work planning and achievement of targets. Thus, during the course of the study the occurrence of these events presented a scenario which was close to reality in terms of the occurrence of administrative and other vital events.

In the TAM study, in-depth interviews were conducted with officials at the district, sub-district and Mandal level in order to understand their perceptions and suggestions for better utilisation of time by FLHWs, AWWs and ASHAs.

Insights from health department official's interviews

The DMHOs, across the three districts, realised that the key factors which positively impact the FLHWs and ASHAs work are: 1) Supervision 2) Work planning and routine follow ups 3) Periodic training 4) Coordination between 1st ANMs and 2nd ANMs and support received from ASHAs 5) Non Financial incentives especially motivations, awards etc. The factors that impact them negatively are 1) Introduction of multiple health programmes and records with a corresponding increase in the workers' duties given the existing unfilled positions and high population load. 2) Geographical terrain for e.g. in Srikakulam which is very hilly and with tribal habitations with no/kaccha roads. 3) Less focus on the profile of MPHWS-M. 4) Community level factors like lack of awareness and support. 5) Status of infrastructure and facilities for e.g. while accompanying women in labour.

Coordination and support between FLHWs and ASHAs was revealed through 1) Activities on special days and drives like Immunisation Days, surveys etc. 2) Accomplishing routine daily tasks at the field and facility level together. 3) Role clarity, division of areas and balanced task sharing between 1st and 2nd ANMs. 4) Supporting ASHAs in village level house to house outreach.

Officials from the health department also shared the key strategies adopted for the effective functioning of FLHWs and ASHAs such as 1) Deputations. 2) Special district level initiatives like mega camps, and surveillance teams for crisis areas. 3) Active Zilla Parishad meetings: Political awareness building and commitment towards health. Key suggestions given in order to improve

the functioning of FLHWs and ASHAs were 1) Dynamic HMIS. 2) Filling up vacant positions. 3) Strengthening infrastructure of PHCs and SCs. 4) Trainings (refresher trainings periodically and on the job). 5) Improved patient-staff interaction. 6) Emphasis on health education. 7) Improvement in inter-department convergence. 8) Political awareness building/ 9) Work planning and adherence to ATPs. 10) Role clarity between ANMs. 11) Improved facilities for accompanying workers. 12) Supportive supervision. 13) Corrective action to curb intentional absenteeism.

Insights from ICDS Scheme related officials from WDCW Department

It emerged through interviews with project directors/assistant project directors, CDPOs and ICDS supervisors that AWWs services are utilised at the community level mainly in four significant ways 1) Registration of beneficiaries. 2) Mobilising community and generating demand for health and nutrition services. 3) Generating awareness in the community about various available government schemes and their utilisation (*Midday meal scheme, Indira Amrut Hastham/Arogya Lakshmi, Take Home Ration [THR], Supplementary Nutrition Programme [SNP], Sabla programme*) 4) Coordination with health workers especially on special days like NHDs.

There are crucial interfaces between the health department and ICDS Scheme for maintaining optimum health and nutritional status of women and children. Significant ways through which convergence can be strengthened are 1) Common platforms where AWWs and FLHWs/ASHAs can sit across and discuss gaps in reporting. 2) Strengthening convergence meetings beginning from the PHC level to the district and the state level. There is need for MOs and CDPOs to sit across, at least once in three months, and share best workable field strategies and gap areas. 3) Completely involve PRIs for 100 per cent coverage during special days like NHDs, Immunisation Days etc., which can be best achieved through the rapport shared by ASHAs, AWWs and ANMs with the village community.

However the AWWs also face many challenges in their work, which was well recognised by officials. 1) Lack of regular on site supervision. 2) Lack of adequate skills like growth monitoring, conducting ECCE. 3) Lack of equipment maintenance. 4) Aged AWWs, some who had been recruited when the scheme was conceptualised, who have inadequate educational qualification and skills to be able to undertake newer responsibilities 5) Difficult to reach geographical locations 6) Lack of community support 7) Other work tasks which impact routine tasks of AWWs.

In order to improve the AWWs functioning the officials made a few key recommendations which if implemented could be of great significance. 1) Administrative changes like stringent selection and recruitment criteria, filling up the vacant positions of AWWs and supervisors, designing local curriculum which is not only culturally relevant but also understood by the locals, regular work planning, and promotions to be based on performance besides years of experience. 2) Skills building like periodic refresher trainings, exposure visits to model AWCs. 3) Supervision and mentoring with routine follow ups. 4) Regular maintenance of equipment and infrastructure. 5) Enhancing community support by engaging beneficiaries, elders of the community and panchayat members. 6) Intense house visits on a daily basis.

RECOMMENDATIONS

Key recommendations, which have emerged through TAM study were at the level of policy change, governance, and management (administration, human resources, payments, convergence, infrastructure, service delivery). Most prominent were a) to develop standardized work planning and ensure that the ANM 1 and ANM 2 by rotation visit the fields such that there is always one at the sub-centre for a fixed part of the day, b) to redefine job descriptions in line with current community needs and redistribution of work among cadres, c) to develop context specific monitoring and supervision that shall be built in regular service delivery, d) to acknowledge and respect the job description and work planning of workers and ensure that the disruptions are minimized or planned in accordance with worker's work plan, and e) others like augmenting skills of existing work force, refined measures in selection and recruitment of workforce.

1. INTRODUCTION

Health functionaries are central to attaining, sustaining and accelerating the progress on universal health coverage (UHC) and attaining health related Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs). This has been recognised with particular focus on planning, training, staff retention, scope of the practice of the functionaries and human resource management (HRM). According to WHO '*A global strategy on human resources for health (2013)*'¹ low and middle-income countries face severe challenges in ensuring a sufficient, fit for purpose and fit to practice health workforce.

This situation seriously compromises the health status of the communities, particularly the poor and this becomes even more crucial in rural remote settings. Dieleman M. and Harnmeijer J. (2006)² note that *qualified and motivated human resources are essential for adequate health service provision, (Page No. 03)*'. They identified that globally two aspects have gained prominence in addressing vital issues related to UHC and human resources for health (HRH)³:

- Addressing the retention of health workers through ethical recruitment by high income countries (HICs), as well as developing, implementing and evaluating retention strategies in low income countries (LICs).
- Ensuring that available workers are actually at work and are performing well to provide quality care.

To achieve the MDGs and SDGs, availability of adequate and appropriately motivated manpower is crucial. However, in developing countries, manpower is often inadequate and often the performance is substandard. The Indian situation in relation with scarcity of human resources and quality of performance both at the facility and field level is no exception especially when it comes to the most peripheral workers working at the frontline, often in rural remote locations.

Frontline health workers (FLHWs) are crucial for any health system to succeed as they are the ones who implement the programmes and deliver the required care. On one side there is a realisation by public health managers that the FLHWs do not work properly and are underutilised while in contrast the FLHWs feel that, day in and day out, with the introduction of newer health programmes and initiatives new activities are added to their job responsibilities. To name a few, in the year 2005, a major flagship programme National Rural Health Mission (NRHM) along with the *Janani Suraksha Yojna (JSY)* was introduced. Under National Vector Borne Disease Control Programme (NVBDCP) rapid diagnostic test (RDT) was included in 2005 followed by Artemisinin—based combination therapy (ACT) in 2006. A major onus of NVBDCP is on the Multipurpose Health Worker Male (MPHW-M), the Anganwadi worker (AWW) and Accredited Social Health Activist (ASHA). In 2013, initiatives such as RMNCH+A strategy, National Health Mission (NHM), *Rashtriya Bal Swasthya Karyakram (RBSK)* etc. were introduced.

¹ http://www.who.int/hrh/documents/strategy_brochure9-20-14.pdf?ua=1

² Dieleman M. and Harnmeijer J. (2006): *Improving health worker performance: in search of promising practices*, A report submitted by KIT-The Royal Tropical Institute, Netherlands to WHO, Geneva

³ Dieleman M. and Harnmeijer J. (2006): *Improving health worker performance: in search of promising practices*, A report submitted by KIT-The Royal Tropical Institute, Netherlands to WHO, Geneva

Weekly Iron Folic Acid Supplementation (WIFS), India Newborn Action Plan (INAP), *Rashtriya Kishore Swasthya Karyakram (RKSK)* were the other recently launched initiatives focusing specifically on the health of women, children and adolescents. Apart from these under existing national health programmes, new phases of the earlier programmes have been also initiated which are mandatory for health workers to follow both in rural and urban areas. For example, Phase Two of the Revised National Tuberculosis Control Programme (RNTCP) was initiated in 2006, National AIDS Control Programme (NACP) Phase Four was initiated in 2014.

All this is in the present situation of high patient load amidst acute shortage of manpower on the ground. There have been hardly any studies that have studied the work load of FLHWs and their time utilisation especially in the Indian context. Hence, it is in this context that the present study was carried out across selected districts of Andhra Pradesh (AP) and Telangana (TS).

1. RATIONALE FOR THE TIME AND MOTION (TAM) STUDY

The Time and Motion (TAM) study has been devised with the rationale to understand the role and utilisation of time by grassroots public health service providers including FLHWs (ANM, MPHW-M) and ASHAs from the health department and AWWs from the Integrated Child Development Services (ICDS), Women Development and Child Welfare Department (WDCW) in line with their actual job description and work practice. It is believed that this will enable in not only better management of time amidst multiple health programmes which FLHWs cater to, but also lead to a realistic assessment of overall workload and performance of the workers. The study attempts to look into some of the crucial aspects like how do the FLHWs perform, do we need to better plan the work schedule or revisit the job responsibilities of each of the cadres in order to enhance their overall work performance. This in turn is believed to direct more concerted policy level implications with respect to the functioning of FLHWs. The AWWs have been also included within the scope of the study since FLHWs and ASHAs very significantly interact with AWWs from ICDS in delivering health services to the village community.

2. TAM TECHNICAL REPORT

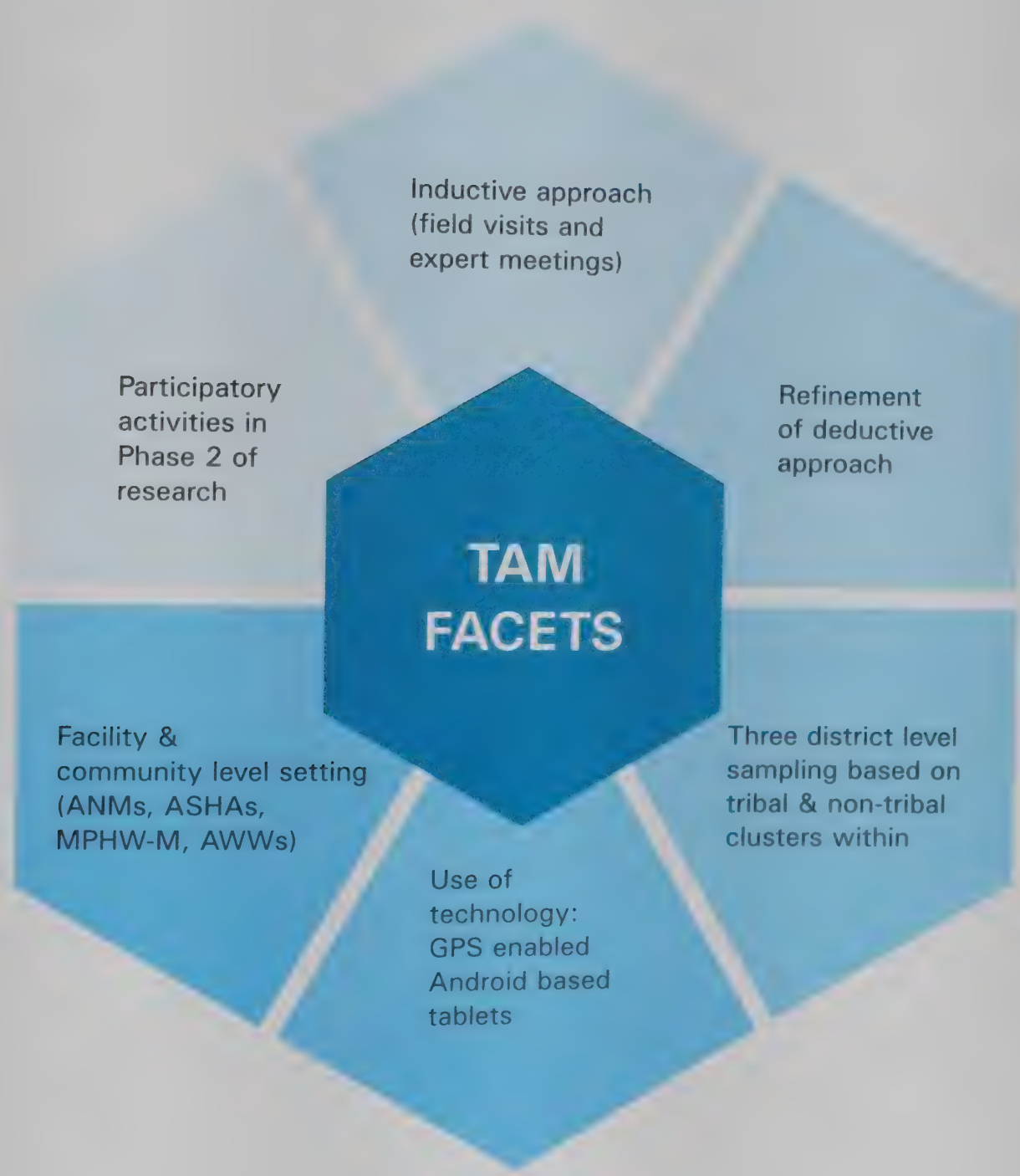
The report was primarily written for health policy makers and administrators both at the state and national level, planners, managers and other related stakeholders like academicians, practitioners from civil society organisations (CSOs) working in the field of public health. The report also captures some of the best practices with respect to time utilisation and performance of grassroots public health workers.

An in-depth desk review of secondary literature was performed first, as presented in detail in the Unit on Review of Literature in the report. Scientific literature pertaining to TAM studies undertaken both at the national and international levels was referred to. This not only gave a background of the situation but also further refined the directions to conceptualise and operationalise the TAM study aimed at understanding the management of workload and work pattern among public health functionaries across AP and TS.

While the technical report encapsulates statistical data derived through TAM observations undertaken with FLHWs and AWWs, through interviews it also tries to understand deeper aspects determining utilisation of time by them in a particular manner. These qualitative insights were captured at different levels from top to bottom i.e. officials at the district level, sub-district and *Mandal* level to supervisors and FLHWs, ASHA and AWWs. It must be noted that findings from the study report cannot be generalised in a pan Indian context, but they are representative of the situation of FLHWs, ASHAs and AWWs from specific geographical territories corroborating with the larger existing picture with reference to these workers.

The present study was a unique work in the domain of health systems and policy research mainly because of its methodological rigor and setting in which it was carried out. As evident from the review of literature TAM studies have been majorly undertaken in hospital/health facility settings with a cadre of health professionals like doctors, public health nurses etc. However, the present TAM study was one of its kind, studying the grassroots health workers like FLHWs (ANMs and MPHW-M), ASHAs and AWWs both at the facility level and in an open community setting. This was certainly challenging especially when health workers were in the field for service delivery. The Figure below attempts to capture a few facets of the TAM study (Figure 1). Details of the same are discussed in depth in Methods and other relevant places in the technical report. The detailed processes and evolution of TAM research activity on the course, including conceptualisation and deductive approaches, have been dealt with separately in 'Process Documentation of Time and Motion Study' (not included in the structure of the technical report).

Figure 1: TAM Study Facets



3. ORGANISATION OF THE REPORT

The present technical report is divided into seven major Units and the Executive Summary. Unit One covers the introductory aspects about the study. It explains about the study's rationale, its assumptions subtly leading to the context building for the present study. This is followed by Unit Two on the aims and objectives of the study. Unit Three covers the in depth literature review pertaining to TAM studies at the global and national level. This gives a sound theoretical background to the conceptualisation and execution of the present study. Unit Four covers methods in detail. The findings and analysis have been presented in Unit Five as two parts (Part A and Part B). Unit Five (Part A) encapsulates the findings and analysis related with FLHWs (ANMs, MPHW-M), ASHAs and officials of the health department in a systematic interpretative manner. Unit Five (Part B) present the findings and analysis related to AWWs and officials from the ICDS Scheme. The technical report concludes with Unit Six on recommendations with policy implications to define the way forward. Unit seven highlights about key discussions held in the consultation related with functioning of frontline service providers. Annexures are given towards the end of the report.

2. AIMS AND OBJECTIVES

The TAM study aims to analyse the amount of time the FLHWs and AWWs spend on specific activities as per their job description, the distance travelled by these workers during day-to-day activities, and the physiological impact of the work environment upon them.

1. TAM OBJECTIVES

The study has been conceptualised with focus on the following three key objectives.

1. To demonstrate time utilisation by FLHWs, ASHAs and AWWs in performing various activities based on job descriptions.
 - 1.1 To quantify the time utilisation by FLHWs and AWWs in various activities by using the TAM study.
 - 1.2 To understand the facilitating factors, barriers and specific reasons for their (FLHWs and AWWs) pattern of time utilisation.
 - 1.3 To explore facilitating and factors that act as barriers in work time utilisation by ASHAs.
2. To explore the perceptions and suggestions from the health and WDCW (ICDS) Department officials at the district, sub-district and facility level, about patterns of time spent by FLHWs, AWWs and ASHAs.
3. To suggest recommendations to policymakers/administrators and other related stakeholders for effective utilisation of time by the FLHWs, AWWs and ASHAs.

3. LITERATURE REVIEW

The present Unit on review of literature begins with a general overview about health for human resource concept in general and TAM in particular. A brief highlight about the TAM approach in the management domain has been given. Followed by this an in-depth but crisp review of literature has been given covering TAM studies in the health sector globally and nationally respectively. The focus has entirely been upon *'how different categories of medical professionals /grassroots workers spend their time in service delivery'*. At the national level, studies across different departments (including health) and states were reviewed in order to arrive at a holistic understanding. Wherever required newspaper items and organisation's reports have also been referred to. An attempt has been made to draw from a range of work in order to render a sound conceptual understanding to the practice. A detailed bibliography has been given in the end along with a matrix which guided the search.

The literature review was undertaken during the formative phase of the TAM study when conceptualisation and technical improvisations related with the study were under process.

1. METHODOLOGY ADOPTED IN UNDERTAKING REVIEW OF LITERATURE

An extensive literature review was undertaken where secondary literature pertaining to the TAM study was reviewed. The literature was mostly acquired (Figure 2) from Google Search and Google Scholar. Databases such as PubMed, Medlar, Science Direct and Jstor were used to refine the search. Different combination of words like *'time and motion studies, time and motion studies in health sector, human resources for health, time and motion studies in India, time and motion studies on frontline health workers in India, human resources for health in India, shortage of health care workforce in India, time and motion studies in Andhra Pradesh and human resources for health in Andhra Pradesh'* were also used to select the most appropriate literature available on web. This enabled the collection of a wide array of literature which eventually helped in doing a crisp review based on the study objectives.

This was supplemented further by secondary identification of sources using article bibliographies, and key references provided. Reports from government ministries such as Rural Development, Human Resource Department, non government organisations such as Public Health Foundation of India (PHFI), were also referred to. A detailed account of the same is given in Figure 1 which clearly depicts the scheme adopted for a systematic selection of literature defining the inclusion and exclusion criteria adopted.

1.1 LITERATURE SELECTION CRITERIA

While searching for available literature on the use of TAM, the initial focus was on understanding the existing studies across the globe. The literature search also focused on work performance impacting factors like motivation, training, and supervision of these workers. The focus was then narrowed down to studies done in the Indian context. Further search was intensified to identify studies carried out in AP and TS. The core focus of the search was to identify studies carried out in the health sector. The literature review purposefully eliminated studies related to industries, and business management in the final search and retained

exclusive focus on health functionaries. All available materials over the past ten years were reviewed. The majority of literature focused upon secondary factors which were crucial in impacting time utilisation and work performance of workers in total.

Figure 1: Literature selection criteria

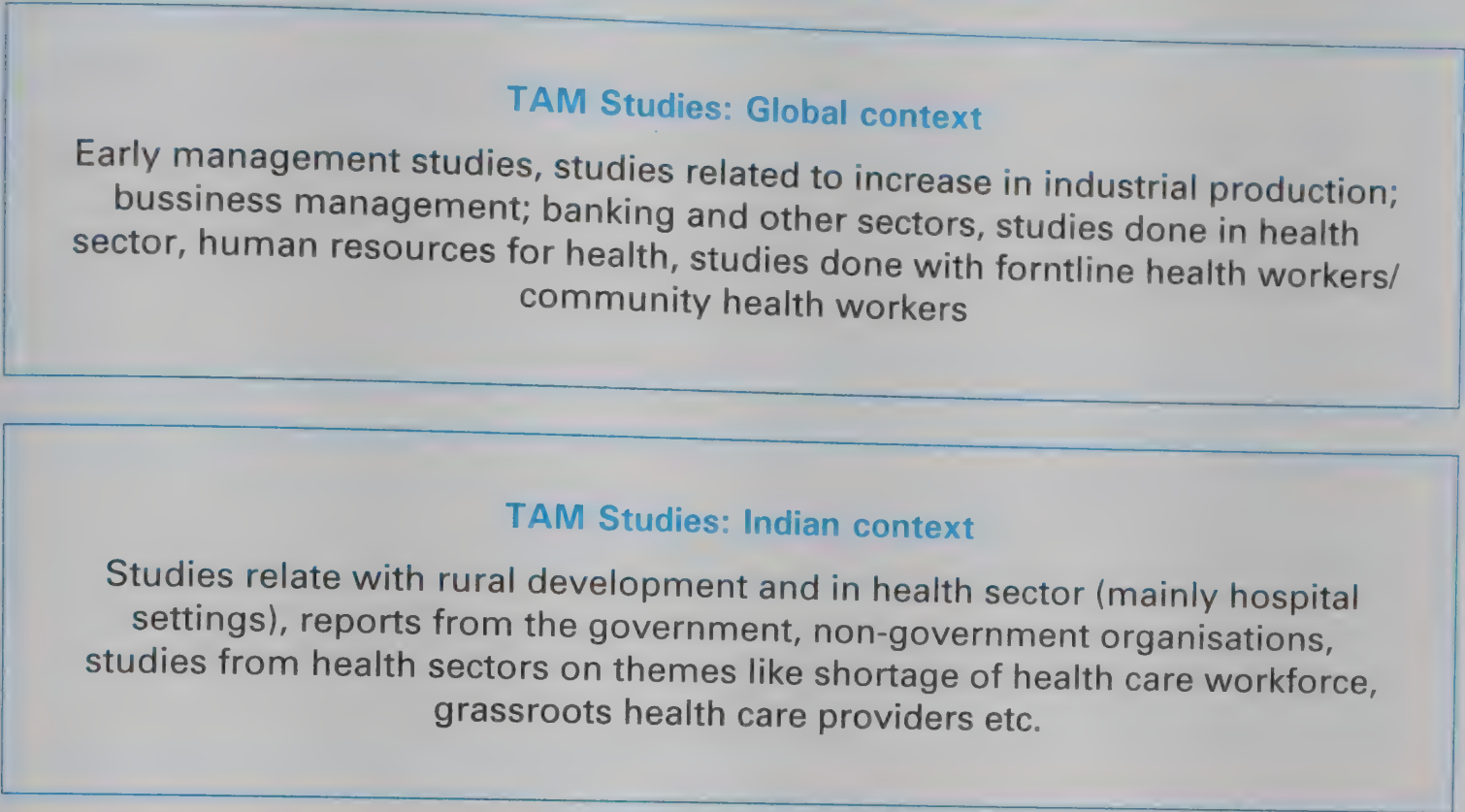


Figure 2: Systematic search of literature

Source for Literature	Total Collected	Total suitable for review	Total Reviewed (Foreign, Indian, Local)
Google Search, Google Scholar	14	8	8
Pub Med, Science Direct, JSTOR, Sage	25	16	16
Published Articles, Thesis, Reports	19	9	9
Books and Grey Literature	10	7	7

1.2 LIMITATIONS

- Scarcity of adequate TAM studies with public health functionaries and especially those functioning at the grassroots.
- Limited availability of larger evidence base (quantitative) in the Indian context except for a few done in hospital settings and associated with secondary factors like workplace motivation etc.
- Non availability of reports on methodological utilisation of TAM studies in the health sector in the Indian context.

2. INTRODUCTORY BACKGROUND

Health functionaries are central to attaining, sustaining and accelerating the progress on universal health coverage and attaining health related MDGs. This has been recognised with particular focus on planning, training, staff retention, scope of practice of the functionaries and HRM. In order to realise the call of the Alma-Ata declaration (1978) to protect and promote health for all, public health functionaries are an important human resource and understanding their use of time is significant for providing high quality primary and higher levels of health care to the general public and especially to rural masses in countries like India. The recent report, *A Universal Truth: No Health Without A Workforce* (2013)ⁱ from World Health Organization (WHO) has noted that in many countries there is a critical shortage of health care staff which has reduced the range and quality of services offered.

According to WHO, *A global strategy on human resources for health: Workforce 2030*ⁱⁱ low and middle-income countries (LMIC) face severe challenges in ensuring a sufficient, fit for purpose and fit to practice health workforce. The Indian situation in relation with the scarcity of human resources for health both at the facility level and field level is no exception. The scenario pertaining to rural India presents a critical shortage of health care workforce (Hazarika I 2013ⁱⁱⁱ; Garg S, Singh R, Grover M 2012; Nandan D & Agarwal D 2012^{iv}; Rao M et.al. 2011^v; Rao K, Bhatnagar A & Berman P 2009^{vi}; 2012^{vii}; Nandan D, Nair KS, Datta U 2007^{viii}) which can be seen 'at the Primary Health Centre (PHC)/ Community Health Centre (CHC) level, there is a 23% shortfall of nurse midwives or staff nurses'^{ix}. Similarly, 'there is a 38.2% shortfall in the number of health assistants (female) at PHCs, while the number of health assistants (male) is less by 52.6%. Also there is a 7.8% deficit in the number of health workers (female) at the Sub-centre (SC) and PHC. The number of health workers (male) is short by 65.2% at the SC level^x.'

It is clearly evident through studies that there exists an acute shortage of human resources in public health service delivery in India. Increasing gaps in terms of sanctioned versus actual positions of public health functionaries, especially at the grassroots level, will have a definite bearing on realising the goal of NRHM^{xi}. In order to have a comprehensive scenario with an evidence base, there is a need for systematic research both at the systems and policy level. Undertaking TAM studies would facilitate identifying issues related with time management by health workers and other crucial operational aspects like supervision, training, logistics etc. It is in this context that in the year 2014 a need was felt to undertake a TAM study in AP and TS States with FLHWs, ASHAs and AWWs from the ICDS Scheme since there are crucial points of work coordination with workers from the health department. This becomes even more important in the realm of the existing situation of the grassroots health work force. As on March 2012 the situation related to AP (prior to bifurcation) has been '*the shortage of health care workforce especially the health workers (Male) at Sub-centres short by 63.2% and the health Assistants (Male) at PHCs not at all positioned though there was a need of 1624 staff.*^{xii} Nevertheless, the number of health workers has risen significantly in recent years; the problems of imbalances in their distribution persists.^{xiii}

Having said that, the present TAM study, across AP and TS has been conceptualised in order to understand the time utilisation by FLHWs, ASHAs and AWWs in line with their job description and actual work practices. It is hoped that findings from the pilot study will help to devise strategies for better utilisation of time by these workers who are most crucial for direct service delivery to rural masses. This becomes even more crucial in the realm of existing human resource crunch and limited coverage of health services at grassroots level especially in rural settings.

3. TIME AND MOTION (TAM) STUDY

3.1 TIME AND MOTION STUDIES: A MANAGEMENT CONCEPT

TAM study is the scientific study of the conservation of human resources in the search for the most efficient method of doing a task. Time study began in the 1880s as a means of wage-rate setting by Frederick W. Taylor, who is regarded as the "*father of scientific management*." Motion study was developed by Frank B. Gilbreth and Lillian M. Gilbreth and consists of a wide variety of procedures for the description, systematic analysis and means of improving work methods. The business management theory proposed by Frank and Lillian Gilbreth suggests that "*by reducing number of motions in a task can increase the efficiency and to understand an entire task there is need for incremental study of motions and time*^{xiv}". "*The Gilbreths used time and motion studies to determine how worker efficiency could be enhanced and productivity improved*^{xv}"

Price B. (1989) in his study articulates that, "*At the very moment that his (Frank) integration of systematic management, time study for piece rate setting, and motion study for labor efficiency gave him the potential to gain control of all on-site work*^{xvi}."

The TAM approach has been successfully applied to a variety of settings like factories, hospitals, department stores, housework, banks, cafeteria work, libraries, music, and for many other human activities. For instance, factories have used it to reduce wasted time, while banks use it to help team members reach their sales goals. However, the goal of TAM is not simply efficiency. For instance, Dinius O J (1964) in his study Brazil's Steel City: Developmentalism, Strategic Power, and Industrial Relations in Volta Redonda says (pg. no. 217) that, "*Engenharia Industrial (EI), its three main tasks were to create a rational pay structure, to determine standard production times by conducting Taylorist time and motion studies, and to develop plans for incentive pay to increase the productivity of individual workers, workgroups, or entire departments*^{xvii}."

These studies are done in order to create a baseline that can be used in the future when evaluating procedural, equipment or personnel changes. The goal was to understand the skills required to enable individuals to perform the work and thus to provide the correct training.

3.2 GENERIC OVERVIEW OF TAM STUDIES IN INDIA

In the Indian context it was observed that, the TAM studies had been conducted in the health sector, mainly in hospital/health facility settings, in a few states (Kerala, Gujarat, West Bengal and Karnataka). In Kerala, the TAM study was conducted among public health nurses and women health workers during 2012^{xviii}. The study clearly concluded that the workload of public health nurses was reported to be high with poor promotional prospects. In terms of data both the Kerala and Gujarat studies carry the qualitative and quantitative evidence.

Though TAM studies on AWWs were not available a similar study "A Study on Knowledge of Anganwadi Workers and Their Problems in Rural Field Practice Area of Hebbal, Gulbarga District, Karnataka, India revealed that, "*Anganwadi workers who have studied up to high school (100%) have been successful in maintaining records. Knowledge of Anganwadi workers with regards to immunization services was 90% and with regard to referral services was 86.66%. Anganwadi Workers had very poor knowledge in growth monitoring (16%). It was observed*

that, 73.33% of Anganwadi workers faced overload of routine activity work and excessive record maintenance in inadequate space provided to them^{xix}."

An evaluation report on ICDS (March 2011) notes that "AWWs have also been involved in other schemes besides the ICDS and this takes up considerable amount of their time. The average time that an AWW spends on other schemes is 6 hours per day and 14 days in a year, which is quite a substantial. On an average, more than 80 per cent of AWWs were involved in one or the other schemes apart from ICDS. Orissa, Maharashtra, Chhattisgarh, Andhra Pradesh and Bihar had more than 90 per cent of their AWWs working in other schemes while the least percentage was in Punjab and West Bengal (<60%)"^{xx}.

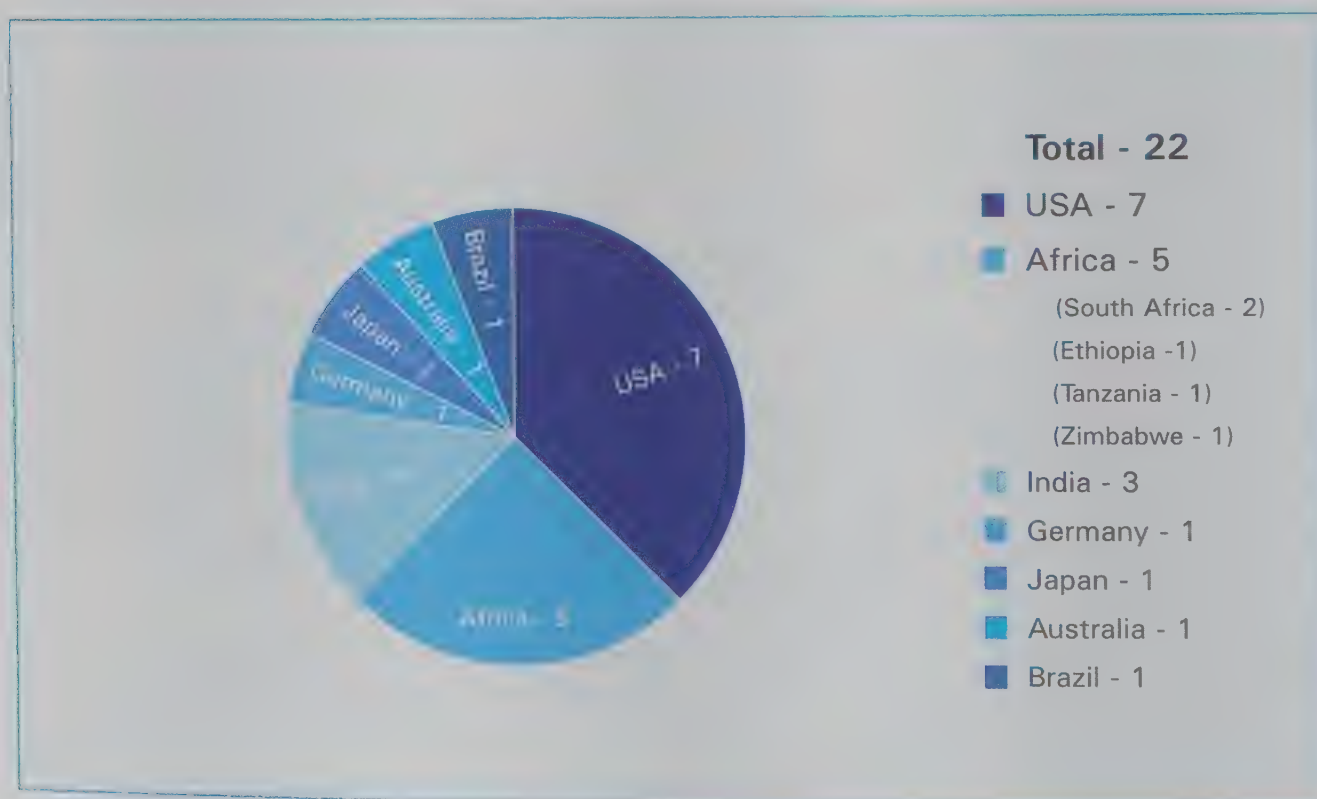
In addition to this, TAM studies were conducted in the rural development sector in order to study the schedule of rates in the National Rural Employment Guarantee Scheme (NREGS; 2007).

"In the course of implementation of the works carried under the scheme it was found that the rates were invariably low for the beneficiaries who were opting for employment under 'NREGA' Scheme. More often, it was found that to achieve the Minimum Wages prescribed for 'NREGA' works, the quantum of work task to be performed for existing Schedule of Rates was high. As a result, the workers did not avail Minimum Wages. Consequently, authorities conducted 'Work-Time-Motion' studies to fix 'Schedule of Rates' for NREGA works, keeping in view the ability of the workers to perform the quantum of work to receive minimum wages notified by the competent authority of different State/UTs. Work-Time-Motion Studies have been collected from some of the selected states, namely, Tamil Nadu, Andhra Pradesh, Gujarat and West Bengal^{xxi}."

The National Institute of Rural Development (NIRD), Hyderabad had conducted another study to understand the planning and implementation of NREGA in Bihar during 2006-07 using TAM to determine the quantum of output from workers^{xxii}.

4. TAM STUDIES IN THE HEALTH SECTOR: GLOBAL PICTURE

Figure 3: TAM studies in the health sector



Patton Jr. M.W (2011) conducted a study as part of his Master's thesis for the University of Kentucky on Developing a TAM Study for a Lean Health Care Environment. The study sought to establish an accurate method for observing and documenting processes in a lean health care environment and was designed to observe and document how resident doctors spend their time in the University Medical Centre. The study concluded that *"the time and motion study methodology could be used to describe the work day of a resident. The findings of the trial observations provided information that could be used for several different process improvement ideas in terms of equipment usage, resident education and facility layout."*^{xxiii}

Kranzer K. et. al. (2012) conducted a study at a mobile HIV testing service operating in deprived communities in Cape Town, South Africa. This brought to the fore an interesting dimension of seasonal variations and impact on time utilisation by workers. The study was conducted at the mobile unit over one week in 2010 and two weeks in 2011 with a total of 13 complete screening days being observed. The study noted, *'There was no difference in the number of patients screened per day and time allocated to different tasks during the 2 screening periods. However, the number of days per months when TB screening was conducted was higher in summer compared to winter months (pg. 09)'*^{xxiv}.

Another study undertaken by Janowitz B. et. al. (2002) in Family Planning Clinics of Zimbabwe noted, *'The median length of visits for new acceptors was longer following retraining (27 minutes) than it was before (20 minutes), and the proportion of such clients who received various syndromic management services increased. Yet even after retraining, providers spent less than 40% of their time with clients. Observation revealed substantial unoccupied time in early morning and late afternoon. If more clients received services, time spent with clients would increase and unoccupied time would decrease; thus, the labor cost of a clinic visit could be cut—at one clinic, by almost one-half. Overall, the average provider cost of family planning visits could be reduced by more than one-third if providers increased the share of time spent with clients from 40% to 60%. (Page No. 58)'*^{xxv}.

A study conducted in Ethiopia by Jefferies L M et al (2014), focused on allocation of time by health extension workers, observed that *'Health extension workers have wide ranging responsibilities for community based health promotion and curative care. Their workload is diverse and they spend time on activities related to family health, disease prevention and control, hygiene and sanitation, as well as other community based activities. Reproductive, maternal, newborn, and child health activities represent a major component of the health extension worker's work and, such as, they can have a critically important role in improving the health outcomes of mothers and children in Ethiopia'*^{xxvi}.

Work done by Manzi F. et. al. (2012) in Tanzania focused upon human resources for health care delivery and noted crucial aspects which actually impact time utilisation by the workers. The study documented inadequate staffing of health facilities, high degree of absenteeism and low productivity of the staff that was present and inadequate supervision in peripheral Tanzanian health facilities^{xxvii}.

Empirical work done by Hendrich A., Chow M., Skierczynski B., A and Lu. Z (2008) done with nurses in 36 Hospitals in USA revealed that *'nurses time was divided into categories of activities (nursing practice, unit-related functions, non-clinical activities and waste) and locations (patient room, nurse station, on-unit, off-unit).'* The study also focused on total distance travelled and energy expenditure. The study identified *three main targets for improving the efficiency of nursing care; documentation, medication administration, and care coordination. It also identified that the changes in technology, work processes and unit organization and design may allow substantial improvement in the use of nurses' time and the safe delivery of care'*^{xxviii}.

5. TAM STUDIES IN THE HEALTH SECTOR: INDIAN CONTEXT

A few TAM studies have also been conducted in India in the health sector. A study on "Workload of public health nurses and other women health workers" was carried out by Srinivasan K. and Sarma P.S. (2012) in selected PHCs, CHCs and SCs across five districts of Kerala. The study focused on information gathered regarding level of workload, duties and responsibilities among the public health nurses and other women health workers. The study concluded that, *"the workload of public health nurses is reported to be high in all the five districts. The problems are caused due to introduction of new programmes from time to time. Additional responsibilities were assigned to public health nurses without providing sufficient resources and also poor promotional prospects, though there are many positions vacant in the next level^{xxix}."*

Manna N. et. al. (2014) conducted a study in an out-patient clinic of a rural hospital of West Bengal. It was carried out in out-patient clinic of a rural hospital in order to find out the time taken in different service delivery points of the outpatient department and to assess the perception of beneficiaries regarding the total time spent in the out-patient clinic. The study concluded that, *"efficient functioning and smooth running of any out-patient clinic requires very good time management and need for further in-depth research in time management in health care delivery system^{xxx}."*

One of the most prominent TAM studies in the health sector was led by Sharma B. et. al. (2010) in Gujarat with Public Health Nurses. The study clearly noted the absence of written job charts leading to non-clarity of duties among the staff.

'The role of the district public health nurses pointed out role confusions among public health nurses and nurse officers due to absence of written job chart and have considerable free time in the office, which could be used for field related activities^{xxxi}.'

The study also brought forward an important aspect about selection and recruitment. It states

'Majority of District Public Health Nurses (DPHNs) are above 45 years and the District Public Health Nurse Officers (DPHNOs) are above 50 years of age which indicates that there has been very less new recruitment. By the time they get accustomed with the kind of duties they are supposed to perform, they are on the verge of retirement. Many reported having health problem with growing age which some admitted that age affected their work as they found it difficult to make visits to the field for supervision owing to ill health'.

The study clearly recorded the time spent by nurses across different work domains, the highest being in office (49%) and less than one third of the time in supervision. While in office they had considerable free time (30%). The study concludes with a strong recommendation to expand the role of nurses at the field level.

'The field days are busier compared to office days. Maximum time is spent in travel (38%) during a field day which is because the District public health nurses and District public health nurse officers do not have a vehicle assigned to them for field visits. It is recommended that since the DPHNs have considerable free time in the office, their role should be expanded in field supervision to include for example investigating maternal and infant deaths, quality of services at the PHC, SCs, especially in critical areas such as labor rooms and operation theatres.'
(Page No. 31)

The Indian Institute of Management (IIM), Bangalore also conducted a TAM study in the year 2014 at the PHC level with the Karuna Trust. This was a small study as part of a larger health systems research and was done in Karuna Trust's project area with FLHWs.

6. SUMMARY OF THE REVIEW

It has been observed that across settings and different sectors, TAM studies have been conducted at different levels. A majority of the studies have been conducted in USA in order to understand the increased industrial productivity and in the business management sector. There were a number of studies available in the health sector, done mainly in USA and African countries. Most of the TAM studies in the public health sector have been conducted at the hospital level in institutional settings.

In the Indian set up, TAM studies have been undertaken in a few states in the health and rural development sectors. It was noticed that the study conducted in Kerala focused on grassroots level health functionaries whereas the study done in Gujarat focused on district level PHNs which is a supervisory cadre for grassroots functionaries. Similarly, the focus of the study done in West Bengal was on rural OPD clinics. Though there are some studies conducted in AP and TS the focus has been mostly on NREGS (rural development sector). As evident from the literature search no TAM studies have been carried out in AP and TS focusing on grassroots level public health functionaries.

Thus, one can conclude that TAM studies are very crucial for devising strategies for better time utilisation of public health functionaries who are most crucial for direct service delivery to the rural masses. This will clearly result not only in better management of time by the workers but also enhance their overall work performance.

4. METHODS

This Unit deals with a detailed description of the methods framework used in executing the TAM study. It describes the study setting and participants, research design, sampling, instruments and methods used for data collection. It also discusses the composition of the research team and study supervision. The approach used in data management and analysis has been also discussed. The Unit concludes with a listing of study strengths and limitations along with ethical considerations.

1. STUDY AREA

Out of 13 districts of AP and 10 districts of TS, the TAM study was undertaken in Khammam District from TS State (Figure 1) and, Chittoor and Srikakulam Districts from AP (Figure 2). In the three districts, the study was carried out across six clusters and 12 PHCs (Table 1, Figure 3 4 and 5).

Table 1: TAM Study Setting

Name of the District	Name of the Cluster	Tribal (T) or Non tribal (NT)	Name of the Primary Health Centre (PHC)
Srikakulam	Kaviti	NT	Borivanka
	Seethampeta	T	Kusimi
Chittoor	Satyavedu	NT	Dasukuppam
	P. Kothakota	NT	T.V. Palli
Khammam	Yellandu	T	Singareni
	Nelakondapalli	NT	Mudikonda

Figure 1: Study district from Telangana



Figure 2: Study district from Andhra Pradesh



Figure 3: Study setting in Srikakulam District

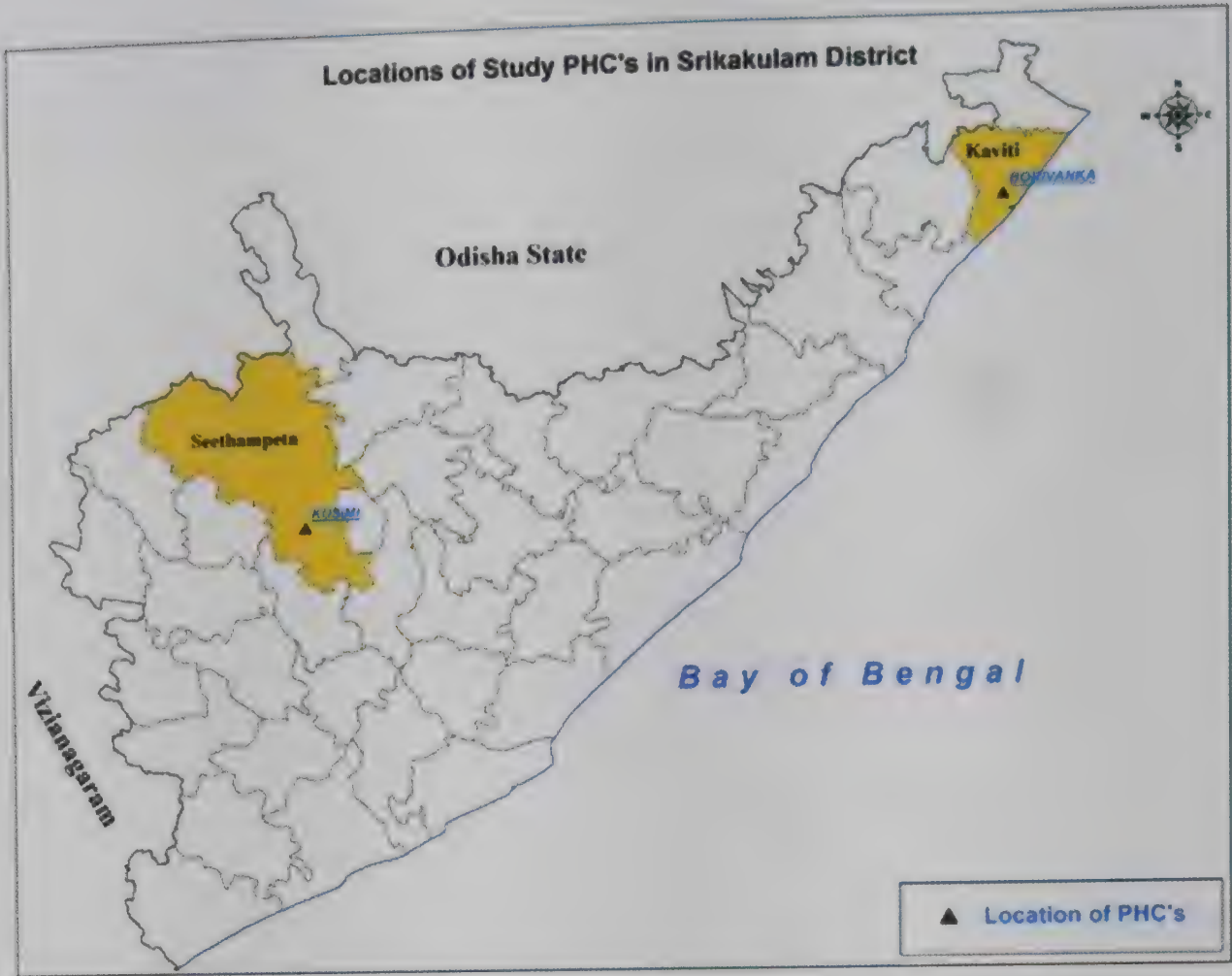


Figure 4: Study setting in Chittoor District

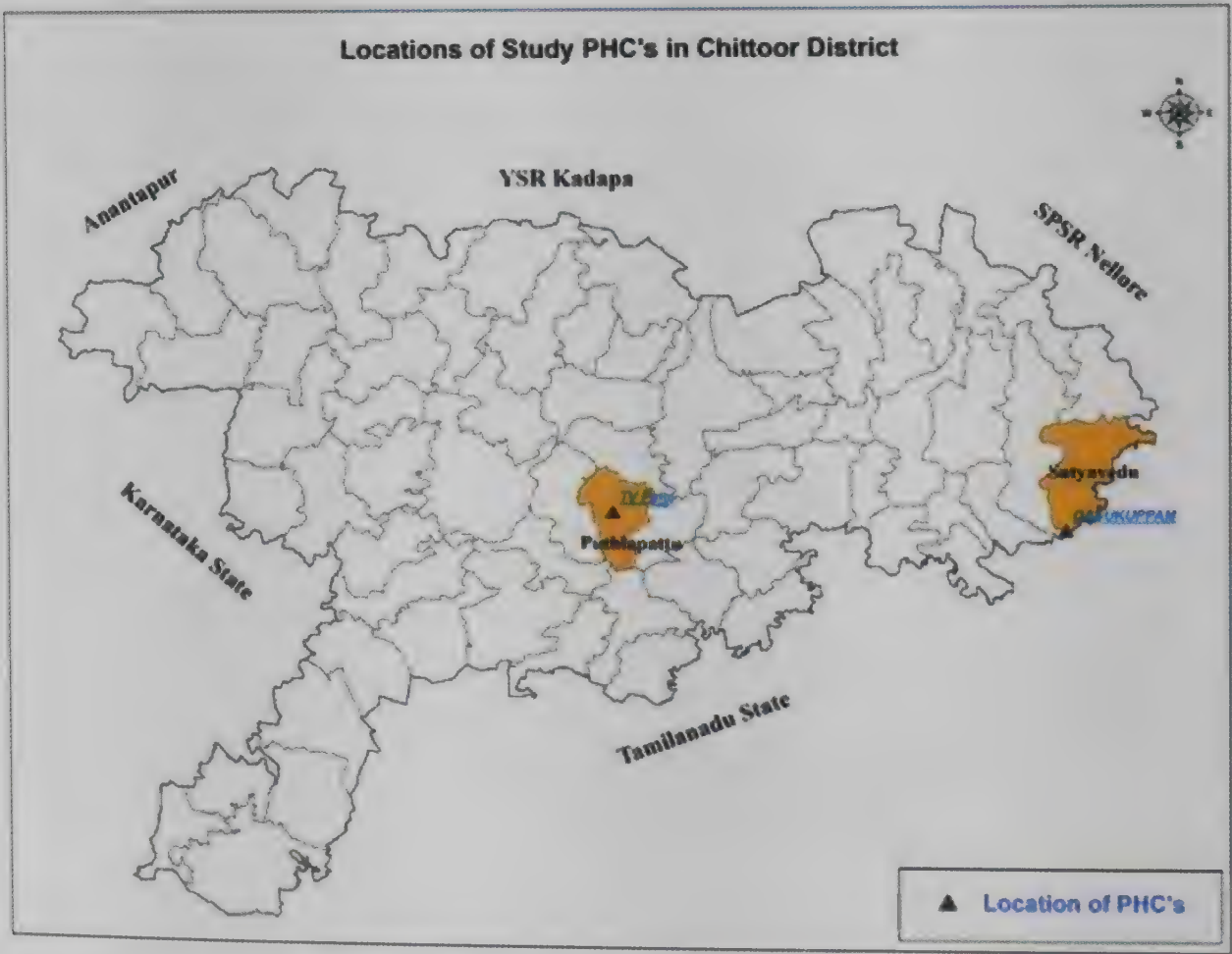
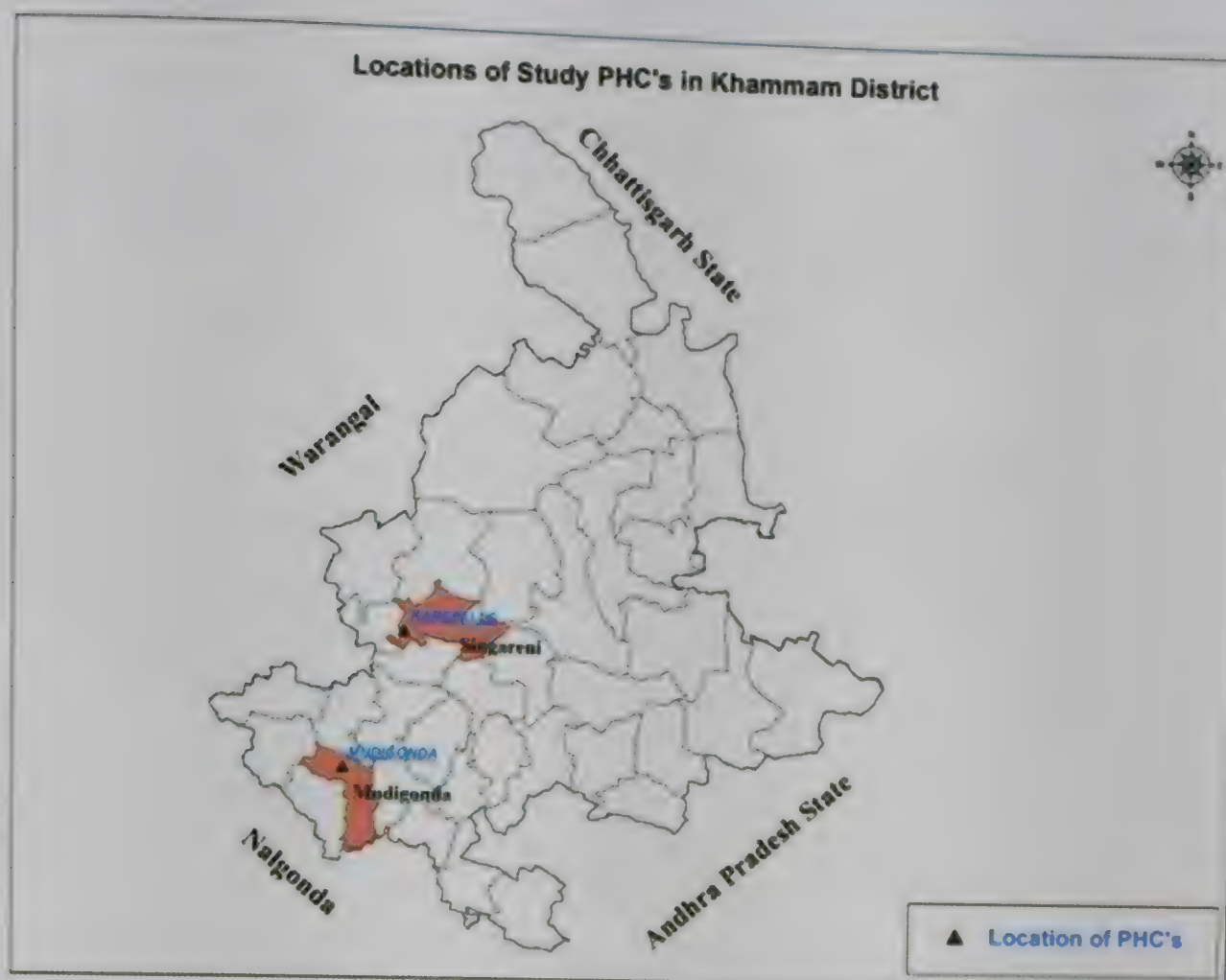


Figure 5: Study setting in Khammam District



A detailed socio-demographic profile of the study districts along with a brief description of health indicators and district health infrastructure is presented below.

SRIKAKULAM

According to the 2011 Census, Srikakulam^{xxxii} district has a population of 27,03,114 of which 1,61,106 people are tribal. The total area of the district is 5,837 sq. km and the district has a 193 km long coast line. Density of population in the district is 926/sq. km. The child sex ratio for Srikakulam is 954/1000 male children. The adult sex ratio is 1015/1000 males. The district recorded a decadal growth rate of 6.38 per cent (2001-2011). The district has 38 sub-district administrative units which are known as *Mandals* covering three revenue divisions. Srikakulam has a total literacy rate of 62.30 per cent of which it is 72.25 per cent for males and 52.56 per cent for females.

District health infrastructure^{xxxiii}: There are no government or private medical colleges in the district.

There is one district hospital, two area hospitals, 18 Community Health and Nursing Clusters (CHNCs) (DLHS 4). As per rural health statistics (2014-15)^{xxxiv} Srikakulam has 488 SCs and 76 PHCs. A total of six new born stabilisation centres exist in the district.

CHITTOOR

Chittoor^{xxxv} is the second largest district in Andhra Pradesh and is located in the Rayalseema region. Chittoor is predominantly a rural and backward district with a total population of 41.1 million as per the 2011 Census Survey, and 30 per cent of the population is living in urban areas. The district has a total of 66 Mandals. The child sex ratio is 931 females to 1000 males,

and male literacy level is 79.83 per cent and the female literacy level is 63.28 per cent in 2011. Around 19 per cent of the population in the district belongs to the Scheduled Castes while four per cent belongs to Scheduled Tribes. Agricultural labourers constitute 39 per cent of the workforce in the district.

District health infrastructure^{xxxvi}: Chittoor District has one medical college, one district hospital, nine area hospitals and 20 CHNCs along with 95 AYUSH clinics in the public sector. There is one government maternity hospital in Tirupathi. There are nine CHCs, 94 PHCs and 653 SCs across the district (Rural Health Statistics, 2014-15).

KHAMMAM

Khammam^{xxxvii} is one of the 10 districts of TS and according to the 2011 Census the population of the district stood at 27,98,214. The district has a population density of 175/sq. km. The child sex ratio was 958 females per 1000 males. The district recorded a decadal growth rate of 8.50 per cent (2001-2011). The district has 41 Mandals; 17 in the plains and 24 in the tribal area, and has 2902 Census Villages; 76.57 per cent of the district’s population resides in rural areas. Khammam’s population comprises of 12.87 per cent Scheduled Castes and 19.97 per cent Scheduled Tribe. Khammam has a total literacy rate of 65.5 per cent of which the literacy rate for males is 73.2 percent and for females it is 57.9 per cent.

District health infrastructure: In Khammam District there is only one medical college which is private. There is one district hospital, two area hospitals and 11 CHNCs. There are a total of 57 PHCs and 549 SCs (Rural Health Statistics, 2014-15).

HEALTH INDICATORS ACROSS STUDY DISTRICTS

Table 2 presents a list of key health indicators across Srikakulam, Chittoor and Khammam based on DLHS-4 (2012-13) data.^{xxxviii}

Table 2: District wise key health Indicators (DLHS 4)

S. No	Indicator	Srikakulam	Chittoor	Khammam
1.	Current use of family planning methods (any method) %	67.5	72.4	63.4
2.	Fertility (%)			
a	Births to women aged 15-19 years out of total births	3.8	5.4	4.6
b	Women aged 20-24 years reporting birth order of 2 and above	37.4	36	35.8
c	Unmet need of family planning (%) Total unmet need	21.3	15.6	27
3.	ANC care (%)			
a	Pregnant women who received any ANC check up	98.3	99.3	96
b	Pregnant women who had three or more ANC visits	90.6	92.7	87.0
4.	Delivery care (%)			
a	Institutional	92.2	91.7	94.8
a.1	Government	36.6	53.3	30.6
a.2	Private	55.6	38.4	64.2
5.	Child Immunisation (%) Received full vaccination	80.0	55.3	44.7

1.1 Human resource status of study area and study states

An analysis was done based on the data available about the state level human resource status for AP and TS. The key source for the same was the Rural Health Statistics 2014-15 published by the Statistics Division of the Ministry of Health and Family Welfare. In the three study districts, the human resource data related to the 1st ANM, 2nd ANM, MPHW-M and ASHAs was also analysed. Data was received from the district health administration and helped in understanding the district specific situations. Table 3 below represents the human resource data of ANM and MPHW-M cadres at the state level.

Table 3: ANMs and MPHW-M related human resource status for AP and TS (As on 31st March 2015)

Particulars	Andhra Pradesh	Telangana
ANM at SCs and PHCs		
Required	8728	5531
Sanctioned	14111	9141
In position	11701	7705
Vacant	2410	1436
ANM at SCs		
Required	7659	4863
Sanctioned	14111	9141
In position	11701	7705
Vacant	2410	1436
MPHW-M at SCs		
Required	7659	4863
Sanctioned	4973	2628
In position	2505	1432
Vacant	2468	1196
ANM at SCs and PHCs in tribal areas		
Required	821	791
Sanctioned	1873	1158

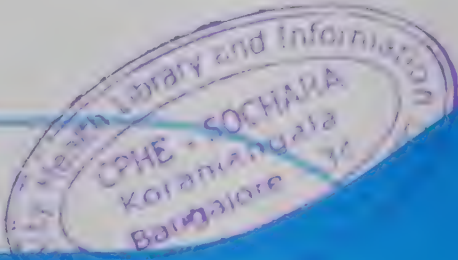
In position	1438	1158
Vacant	435	0
ANM at SCs in tribal areas		
Required	691	698
Sanctioned	1873	1158
In position	1438	1158
Vacant	435	0
MPHW-M at SCs in tribal areas		
Required	691	698
Sanctioned	529	384
In position	238	174
Vacant	291	210
Number of SCs without ANMs or/and MPHW-M		
SCs functioning	7659	4863
Without ANM	0	0
Without MPHW-M	3734	2704
Without both	70	51
Vacant positions at a glance		
ANMs (SC and PHC)	2410	1436
MPHW-M	2468	1196
Female Health Assistant/LHV	229	167
Male Health Assistant	0	0
MO	858	294

Table 4 (a, b, c) represents data for 1st ANMs, 2nd ANMs, additional ANMs (Khammam), MPHW-M, ASHAs for Srikakulam, Chittoor and Khammam. A detailed listing of the same is provided in the Annexures.

Table 4a: Status of ANMs positions in TAM study districts and study clusters

Andhra Pradesh						
	1 st ANMs			2 nd ANMs		
Name of the clusters/ CHNCs	Sanctioned	In-position	Vacant	Sanctioned	In-position	Vacant
Srikakulam* (*Data as on 4 th May 2016)						
Kaviti	15	12	03	15	12	03
Seetampeta	13	11	02	13	10	03
Total across all clusters	478	414	64	478	407	71
Chittoor* (*Data as on 1 st March 2016)						
P. Kothakota	30	22	08	33	30	03
Satyavedu	23	08	15	25	21	04
Total across all clusters	547	395	152	644	544	100
Telangana : Khammam* (*Data as on 5 th May 2016)						
Nelakondapalli	33	32	01	35	33	02
Yellandu	60	58	02	63	41	22
Total across all CHNCs	483	448	36	505	400	105

As it can be seen in Table 4b, in Seetampeta cluster none of the MPHW-M positions were vacant. This is a tribal cluster with hilly and often inaccessible terrain. The impact of all filled positions was reflected through field observations and sharing by ANMs in terms of the significance of MPHWS-M presence and support received from them in their daily work. In Srikakulam, the MPHW-M positions were largely filled which becomes even more significant



in view of the nature of the population, terrain of the district and epidemiological needs of the population. However, overall the number of sanctioned positions for across the three districts is less. Most of the MPHWS-M who are working are contractual workers because no new regular recruitment has been done for this diminishing cadre in the last few years.

Table 4b Status of MPHWS-M positions in TAM study districts and study clusters

Andhra Pradesh			
Name of the clusters/ CHNC	Sanctioned	In-position	Vacant
Srikakulam* (*Data as on 4 th May 2016)			
Kaviti	10	07	03
Seetampeta	06	06	0
Total across all clusters	310	295	15
Chittoor* (*Data as on 1 st March 2016)			
P. Kothakota	15	Regular: 03	05
		On contract: 07	
Satyavedu	10	Regular: 0	05
		On contract: 05	
Total across all clusters	275	Regular: 32	136
		On contract: 107	
Telangana : Khammam* (*Data as on 5 th May 2016)			
Total across all CHNCs** **Cluster wise distinct data unavailable	277	Regular: 14	131
		On contract: 132	

The ASHAs positions were largely in place for Chittoor and Khammam Districts (Table 4c). However, in Srikakulam, the maximum ASHA positions were vacant. A few reasons for this emerged from field level interactions; they were irregular payment of incentives which are insufficient to support their houses financially, compulsion to come to SCs almost daily which compromises their daily wage work etc.

Table 4c: Status of ASHA positions in TAM study districts and study clusters

Andhra Pradesh			
Name of the clusters/ CHNC	Sanctioned	In-position	Vacant
Srikakulam* (*Data as on 4 th May 2016)			
Kaviti	120	91	34
Seetampeta	180	173	07
Total across all clusters	3341	2961	391
Chittoor* (*Data as on 1 st March 2016)			
P. Kothakota	159	156	03
Satyavedu	145	144	01
Total across all clusters	3127	3101	26
Telangana : Khammam* (*Data as on 5 th May 2016)			
Total across all clusters**	3195	3182	12
**Cluster wise distinct data unavailable			

2. STUDY PARTICIPANTS

It is crucial to operationalise the term 'Frontline Health Workers (FLHWs)' as used in the study. FLHWs comprise of ANMs and MPHW-M from the Health Department. They are the salaried workers employed at the PHC level delivering the first line of preventive, promotive and curative care.

The study comprised of two sets of participants. One set comprised of grassroots workers including FLHWs (ANM, MPHW-M) and ASHAs from the Health Department. Another set comprised of AWWs from the ICDS Scheme, WDCW. The ANMs, MPHW-M and AWWs were observed directly for TAM and also interviewed. ANMs and ASHAs were also involved in the respective Focused Group Discussions (FGDs). However, ANMs recruited for FGDs comprised of participants different from the ones who were observed and interviewed earlier. This was because the ANMs FGD was done during the second round of field visits in order to gain better insights from the field based on qualitative data analysis. To avoid researcher's bias and data contamination different ANMs were selected for the FGD.

The second set of participants comprised of officials who were either in-charge of administration from both the departments (Health and ICDS/WDCW) or supervised and monitored workers at the district, sub-district and Mandal level.

3. STUDY SETTING

Observations were done in the natural work environment of the workers i.e., the PHCs, SCs, AWCs and field area. Care was taken that the observer maintained a sober profile and did not interfere in the health worker's or AWWs activities. Officials were interviewed in their respective offices at the Mandal, sub-district and district level. FGDs with ASHAs and ANMs were held either in the SCs or in PHC premises. During interviews it was ensured that participants got to speak confidentially with no external disturbance or non-participants around. At the time of the ASHAs FGDs, only the TAM study team was present. This kind of control over the interview or FGD setting not only ensured privacy for the participants but also eliminated the possibility of external disturbances.

4. RESEARCH STUDY DESIGN

The TAM study is a mixed methods study with '*time and motion*' approach (Figure 6). Given the nature of enquiry, both qualitative and quantitative methods were used to collect data from the participants. In the TAM study, quantitative method (direct continuous observation) was used to study the time utilisation and work patterns of FLHWs and AWWs. Qualitative methods (interviews and FGDs) were used to understand the facilitative factors, barriers to the work of the FLHWs, AWWs and ASHAs and specific reasons for their pattern of time utilisation. Interviews were also used to explore the perceptions and suggestions from the Health and ICDS/WDCW Departments officials. Qualitative methods helped to contextualise the quantitative findings and understand them better.

It must be noted that tool development was done in a phased manner with data/information derived from both primary and secondary sources. A series of field visits were taken in order to get clarity about field realities and based on available secondary literature (reports, academic papers, government orders, books etc) the data collection tools were contextualised. Improvisations were made after each round of field visits followed by a discussion meeting (held in March 2015) where internal core advisory group members of TAM gathered in order to finalise the tools content. Thereafter the tools were pilot tested and revised to be used in the main study. Details of the process are described in depth in the TAM Study Process Document.

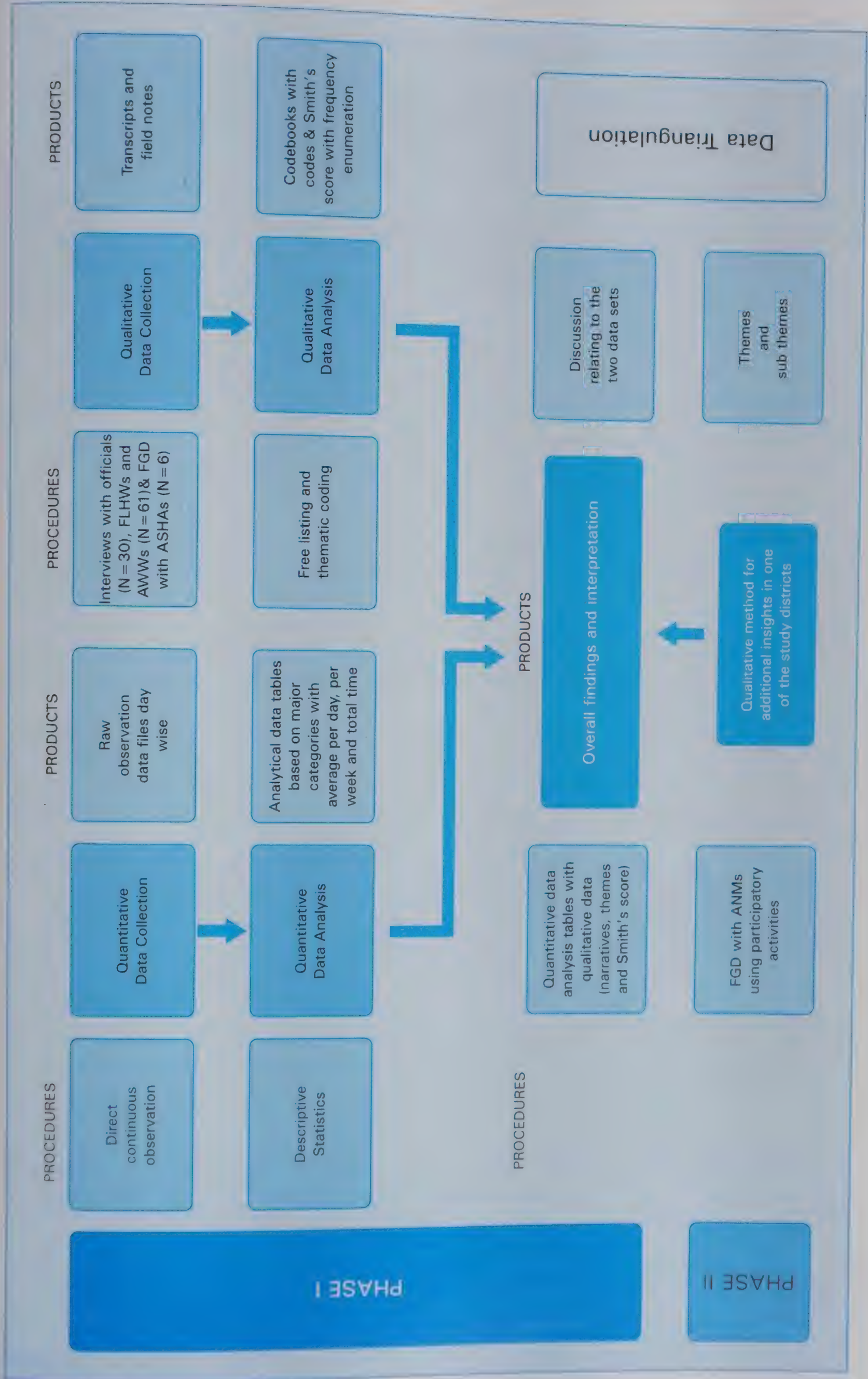


Figure 6: Visual Diagram of Study Design

5. SAMPLING AND SAMPLING FRAMEWORK

Sampling of participants: Three study districts were purposively selected based on the presence of integrated tribal development agencies (ITDA) or the presence of a substantial percentage of tribal population (Refer Table 5 and Figure 7 below). Two districts from Andhra Pradesh (Srikakulam and Chittoor) and one district from Telangana (Khammam) were selected for the study. At the health facility level, through purposive sampling, participants were chosen as described below.

After the district selection, each of the districts was stratified into clusters – tribal clusters and non-tribal clusters. Tribal clusters were remote locations while non-tribal clusters were comparatively accessible clusters. Stratification was done to select different type of clusters so that it allowed garnering information on the effective time utilisation of service delivery and movement between locations in different geographical settings. This was done in order to flag important bottlenecks at the operational level and the coping mechanisms adopted by FLHWs, AWWs and ASHAs. Two clusters were selected, one each randomly within the two strata (tribal and non-tribal). At the third stage, one PHC was randomly selected in each of the selected clusters. At the fourth stage, four SCs were selected from the list of SCs within each selected PHC with information on availability of human resources in the SCs. The SCs which had the required cadre of participants posted were purposively included in the study. All unmanned SCs were excluded. Thus the results may probably reflect a better scenario of work distribution, work load and team work. A deliberate effort was made to select SCs where three SCs were in increasing order of distance from the PHC while the fourth SC was the farthest. Two AWCs within the PHC area were selected of which one AWC was from the SC area close to the PHC while another AWC was in the SC area at a distance from the PHC. All FLHWs posted in the selected SCs and AWWs in the AWCs were selected as participants for the study.

The ASHAs chosen for the FGDs were sampled from the ASHA incentives register available at the sample PHCs. They were selected in a manner that representative ASHAs receiving the lowest to highest incentives were included for the study. One FGD was conducted with 9-11 ASHAs for each selected PHC.

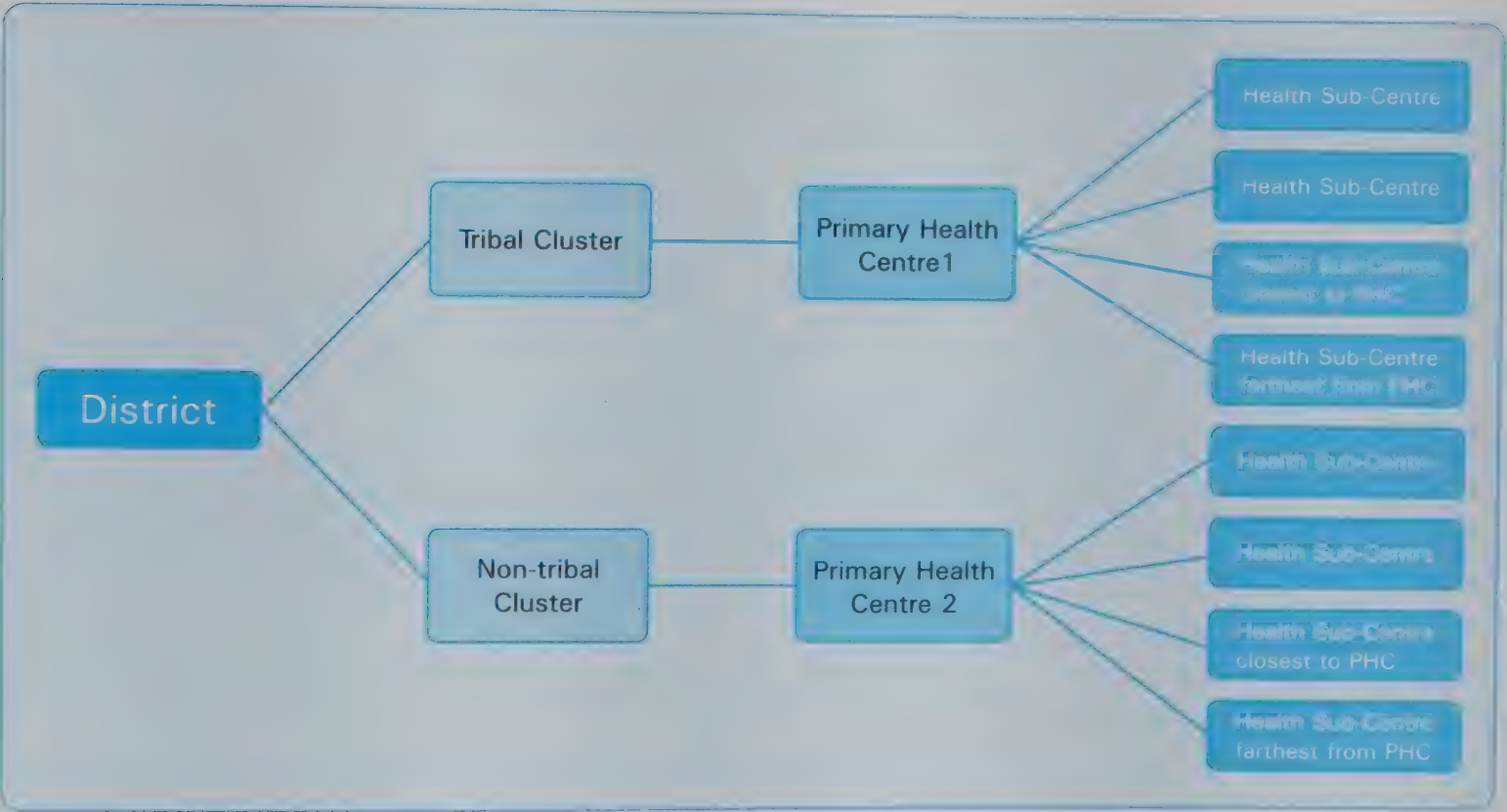
For the FGD among ANMs, one of the sample tribal cluster PHCs from Khammam was chosen as it was convenient. The ANMs for the FGD were selected from the SCs which were not part of the study SCs. A complete new set of ANMs were selected as the previously interviewed lot would have been sensitised during in-depth interviews and would have led to informant bias. A total of eight ANMs participated in the FGD.

Since the TAM study used a mix of observations, interviews and FGDs, all of the participants were approached face to face for direct interaction. However, in the process of selecting participants an exclusion criterion was followed. All study participants who did not wish to participate in the study were excluded.

Table 5: Selection criteria

District: Districts which have either integrated tribal development agencies (ITDA) or have a substantial tribal population	
PHCs	Two PHCs were selected one each from tribal and non-tribal clusters in a district
SC	Under each selected PHC, four SCs were sampled, out of which one SC was farthest from the PHC while the other three were in increasing order of distance from the PHC. The SCs were chosen in a manner that the desired cadre of workers were available.
AWC	Two AWCs in each of the PHCs were chosen. One AWC was in the SC area closer to the PHC while another was in a SC area farther from the PHC.
Study respondents selection (FLHW, ASHA and AWW)	All ANMs, MPHws-M and ASHAs, were chosen from selected SCs; AWWs were chosen from AWCs closest to the SC.

Figure 7: Graphical Representation of Sampling Frame for a District



A total sample size of 60-72 workers were chosen for undertaking the study (Table 6). Within each district, a total of 20-24 workers were observed and interviewed. This range was because some SCs had both 1st and 2nd ANMs⁴ and others had just one ANM, necessitating minimum six to a maximum of eight ANMs per sample PHC.

⁴1st ANMs are regular ANMs employed with health department while 2nd ANMs are contractual ANMs introduced under NRHM since 2005. The nature of job is similar for both ANMs. Rationale for introducing 2nd ANMs was to lend support to 1st ANMs in their tasks. Ideally all SCs should have both ANMs in position.

Table 6: Planned sample for TAM Study

Type of Worker	Sample size at PHC level	Sample size at district level	Total Sample Size
ANM	2 per SC * 4SCs = 8 (Maximum) *6 (Minimum)	8 per PHC * 2 PHCs = 16 (Maximum) *12 (Minimum)	16 per district * 3 = 48 (Maximum) *36 (Minimum)
Multi-Purpose Health Worker – (M) [#]	2 per PHC – preferably from 8 selected SCs	2 per PHC * 2 PHCs = 4	4 per district * 3 = 12
ASHA	One FGD per PHC with 8-9 ASHAs	Two FGDs per district level	2 FGDs per district * 3 = 6 FGDs
AWW	2 per PHC - from AWC closest to SC	2 per PHC * 2 = 4	4 per district * 3 = 12
Total respondents to be covered	10-12	20-24	60-72

However, a total of 61 workers were observed and interviewed in the TAM study (Table 7). The shortage was mainly because of unavailability of MPHWS-M (only 6 were available against the total planned number of 12). None of the study participants refused to be part of the study or dropped out of the study.

Table 7: Actual number of FLHWs and AWWs covered under TAM study

Cluster Name	PHC and SC wise	1 st ANM	2 nd ANM	MPHW-M	AWW
Srikakulam District					
Seethampeta/ Tribal cluster	PHC 1: Kusimi				
	China Kamba	1	0	1	
	Goidi	1	1	1	1
	Sambham	0	1	1	1
	Kusimi	1	1	1	
Kaviti/ Non-tribal cluster	PHC 2: Borivanka				
	P. K. Palem	1	0	0	1
	Kusumpuram	1	1	0	
	B. G. Puttuga	1	1	0	

	SC4: Borivanka	1	1	1	1
Total		7	6	5	4
Chittoor District					
Satyavedu/ Non-tribal cluster	PHC 1: Dasukuppam				
	Ambakkam	1	1	0	
	Kannavaram	0	1	0	1
	K.N Peta	1	1	0	
	Dasukuppam	1	1	0	1
	Sathyavedu 1	Only for male worker		1	
P. Kothakota/ Non-tribal cluster	PHC 2: TV Palli				
	Patoor	1	1	0	1
	P.Kothakota	1	1	0	1
	Rangampeta	1	1	0	
	Thalupula Palle	1	1	0	
Total		7	8	1	4
Khammam District					
Nellakondapalli/ Non-tribal cluster	PHC 1: Mudikonda				
	Banapuram	1	1	0	1
	Kamalapuram	1	1	0	
	Venkatapuram	1	1	0	1
	Mudikonda	1	1	0	

Yellandu/ Tribal cluster	PHC 2: Singareni			
	Madharam	0	1	0
	Manikyaram	1	1	0
	Seetarampuram	1	1	0
	Singareni	1	1	0
Total		7	8	0
Grand total		21	22	6
Total workers		61		

Sampling of officials: Across three districts, a total of 33 officials from the Health Department and ICDS/WDCW were chosen for the interviews. Sampling was done in a manner that it comprised of officials from the district, sub-district and Mandal level in order to get a better understanding about the performance of FLHWs and AWWs. Only those health and ICDS supervisors were chosen who were supervisors in-charge for workers at the SCs and AWCs covered in the TAM study (Table 8).

Table 8: District and Mandal officials sample size for TAM study

Department Name	Cadre of official	Total sample size
Health and Family Welfare	DMHO / Addl. DMHO (if DMHO was unavailable)	03
	SPHO of the study clusters	03
	MO	06
	Health Supervisor	06
ICDS, WDCW	Project Director	03
	CDPO of the project	06
	ICDS Supervisor	06
Total		33

6. TIME AND MOTION STUDY METHODS

The TAM study records how time is distributed by the FLHWs and AWWs across various kinds of activities i.e. health (clinical which are direct services to beneficiaries and non-clinical services like trainings), administrative, records maintenance, other tasks, travel which may not

be directly related with work. This can be defined as *independent and continuous observations of FLHWs and AWWs work to record the time taken to perform various activities*. The data was collected by direct continuous observation of the FLHWs and AWWs over a span of six continuous days involving worker’s movement; follow ups from house to his/her work station or field till returning home.

For the purpose, an observation schema was developed with pre-defined broad categories, sub categories and specific activities within (Table 9; Annexure 1). Data was collected with a deductive approach wherein activities outside the purview of predefined broad categories were recorded as ‘others’. However, it has to be noted that the observation tool was developed based on prior formative work involving a detailed review of literature, expert interactions and series of field visits^v.

Table 9: Template of observation schema used (Cadre: ANMs and main category service delivery)

Category	Sub category	Activity
Service Delivery & Counselling/discussing with patients/family members/ community members	Family Planning	IUCD insertion
		Condom distribution
		Identification and referral for permanent sterilisation
		Permanent sterilisation (tubectomy/vasectomy)
		Counselling/discussing with patient/family/community member
		Any other
	Nutrition	IFA distribution
		Examining and assessing malnutrition
		Referral and accompanying
		Counselling/discussing with patient/family/community member
		Any other
	Communicable diseases (TB, HIV, Leprosy etc)	Identifying/assessing
		Referral and accompanying
		Counselling/discussing with patient/family/community member
		Any other

In order to keep a log of the time, a computer based software programme uploaded on tablets was used (Figure 8 to 13)^{vi}. The most critical information was to identify the specific start, stop and activity change times for an activity, clarity of which was gained through repeated field

^v For details refer the TAM Process Document
^{vi} Dexter Inception Report (2015), TAM Study, Ahmedabad

visits and pilot testing. Whenever multi-tasking occurred, the time was recorded for the primary activity (previously ongoing) and parallel ongoing activities were recorded as secondary activities in the comments section provided in the software and field notes of observers. The times for broad and sub categories were recorded based on related activities as recognised by the observers. Recognition of activities was specially emphasised during the field team’s training.

For recording travel time, wherever participants consented, the observer followed the worker from home itself. If the worker refused to be followed from home to the centre and centre to home, then the time was recorded based on information given by the worker to the respective observer telephonically about her time of departure from and arrival at home. In the field, observers used the same mode of transport as the workers and recorded the consecutive travel time. During the process of observation utmost care was taken to maintain objectivity while observing the workers and disallowing any interference. Field supervisors were constantly present in the field in order to mitigate any challenges.

Figure 8-13: Snapshots from a tablet interface

Figure 8

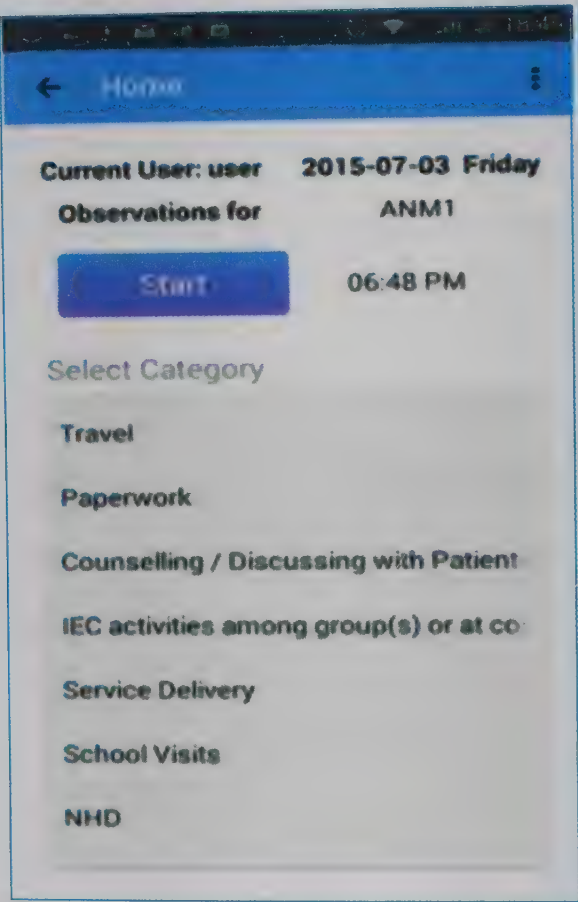


Figure 9

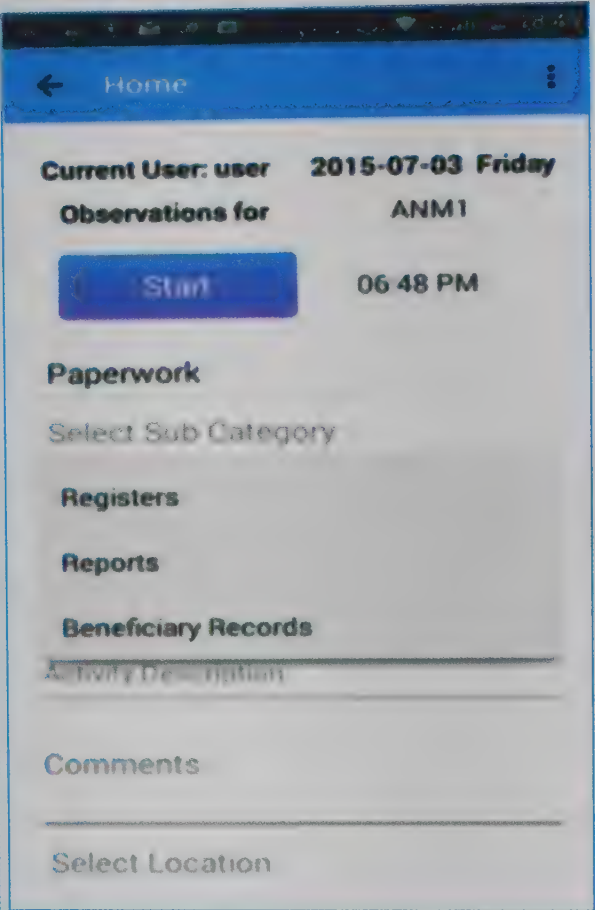


Figure 10

← Home

Registers

ANC register

OR

Activity

TL-HF

TL-FH

TL-HC

TL-CH

TL-FF

TL-CF

TL-FC

PP-RG1

Figure 11

← Home

Registers

ANC register

OR

Activity

PP-RG3

test comment

Select Location

Medak

Srikakulam

Hyderabad

Khammam

Figure 12

← Home

ANC register

OR

Activity

PP-RG3

test comment

Medak

+

Take GPS Location

Stop

Figure 13

← Home

ANC register

OR

Activity

PP-RG3

test comment

Medak

+

Take GPS Location

Stop

7. QUALITATIVE METHODS

- Interviews with FLHWs and AWWs:** All the FLHWs and AWWs were interviewed using the interview schedule comprising of both open and close ended questions. This mix was devised keeping in view the nature of information sought and type of participants interviewed. The interview schedule comprised of three sections; details of which are discussed in subsequent sections
- FGDs with ASHAs:** FGDs were conducted with a group of 9-11 ASHAs. A FGD guide was used to guide the discussion mainly related to their daily work functioning
- FGDs with ANMs:** A FGD was undertaken in one of the sample tribal cluster PHCs from Khammam District. Amongst the FLHWs and AWWs only the ANM cadre was chosen for the FGD as they were one of the main participants in the TAM study. The FGD was conducted after the preliminary findings from observations and interviews were collated. Based on the findings, a FGD guide was prepared to capture the aspects of work planning and functioning as shown by the results. FGDs were followed by two activities engaging the ANMs. One activity comprised of paper pen activity to enlist all reports and records maintained along with challenges faced and suggestions to improve the same. Confidentiality was ensured during the process. The second activity involved Venn diagrams in order to define time management and activities which consumed the maximum to minimum time during a typical working week. The FGD followed by participatory activities yielded in-depth information about observations and interview findings, validating the same
- In-depth interviews with officials:** Open-ended interview guides were used to conduct interviews with officials at the district, sub-district and Mandal level, from Health and ICDS/WDCW Departments. This helped in understanding the officials perceptions and suggestions in relation with work time utilisation by the FLHWs, ASHAs and AWWs

Table 10 below presents a summary of methods and instruments used across various study participants. A detailed description of study instruments is presented in the following section.

Table 10: Methods and Instruments used in TAM

Respondent set	Number of respondents	Method(s) used	Tools/Instruments
FLHWs	60-72	Direct continuous observations and interviews	Observation schema and interview guides
ASHAs	9-11 in each of the 6 FGDs	FGDs	FGD guide
ANMs	8 in 1 FGD	FGDs	FGD guide
District, sub-district and Mandal officials from ICDS/Health Departments	33	Interviews	Interview guides

Interviews with FLHWs and AWWs were usually conducted on the last day of the observation schedule (certain times interviews were conducted on Thursday or Friday because of the participant’s request) and it was ensured that the interview was done after the worker had completed his/her day’s work.

Interviews initiated with research participants were finished in one single sitting. No repeat was required for any of the interviews conducted.

Audio/visual recording

Audio recordings were done for in-depth interviews but only for those participants who gave their consent for the same. The recording was re-played for them whenever they asked for the same. Video recording was not done because of ethical concerns involved.

Field notes

Field notes were prepared in parallel by interviewers during each of the interviews and FGDs. Observers also maintained hand notes wherever more description was required or if there were some miscellaneous aspects which they wished to record. After each round of field visit it was ensured that field notes were documented by the study team in order to take into account field insights.

Duration

Each of the field level interviews with FLHWs and AWWs lasted on an average for 60 minutes. In undertaking higher officials' interviews on an average the duration was 15-30 minutes while the sub-district and Mandal level interviews for officials took on an average 45 minutes each.

The FGDs with ASHAs and ANMs on an average took 60 minutes. The maximum time was consumed in conducting FGDs as it involved a group interaction where all participants expressed their opinions.

Respondent response validation: It is important to note here, that major observations were summarised for each of the participants at the end of each interview and FGD. This was done in order to give scope to modify any aspect that had been shared. If the interview was audio recorded it was replayed. Thus, on the spot respondent response checking was accomplished.

8. DATA COLLECTION INSTRUMENTS

Since the TAM study was a mixed methods research a range of instruments, as described below, were used.

- **Observation schema** was used to keep a time log of activities. Two major categories i.e., productive (comprising of health related, non-health related, documentation, administration, oral communication, trainings domain) and non-productive were defined in order to account for his/her whole day's work. Time utilisation by the worker in travelling and that spent at the location was recorded separately

Observation schema was developed during the formative phase over a span of six months. During the process several consultations were done with the experts and exploratory field visits were conducted to observe the FLHWs day's work. The broad categories, sub categories and activities were identified. The observation schema thus covered the complete spectrum of duties and activities for respective FLHWs and AWWs as per the job descriptions and observations made during the formative phase. This was further verified through intense desk review which also comprised of government orders.

The schema was then built as an application on the Android platform on tablets to ease data collection. It was GPS enabled for two purposes - to monitor the data collection process by observers and track actual distance covered by the workers. However, the distance covered component was not analysed. This programme was pilot tested in a PHC in Medak District and based on observations was further fine tuned for the main study.

- **Interview schedules for FLHWs and AWWs** were used to gather information across various domains like socio-demographic and economic profile, physiological responses and work, specific information about work, work profile and functioning, work planning and supervision, training related, travelling details, meeting schedules, special days like NHD 1 and 2, Immunisation Day etc. Interviews were recorded, wherever permitted, with prior consent of respondents. The interview guide was a mix of open and close ended responses with three sections. Section 1 asked about the socio-demographic information of workers. Section 2 comprised of open ended questions with respect to daily time management, daily work functioning of the workers and recommendations. Section 3 comprised of close ended questions and used the Likert scale for certain responses. It covered information related with physiological conditions, work environment, training, work planning etc. Through interview schedules, an effort was made to describe 'what and why' of the TAM data collected
- **Interview guide for officials** was used briefly comprising of four to five questions with open ended responses. Its main aim was to understand the officials' perceptions of the work functioning of FLHWs, AWWs and ASHAs and recommendations to improve their performance
- **FGD guide** was used to undertake FGDs with ASHAs in order to explore the factors that facilitate them and those that are barriers in their work time utilisation. With ANMs a separate guide was used which was drafted based on emergent themes from the analysis of interview data and trends as noticed in the observation data. It covered key aspects such as time management, work planning, supervision, physiological conditions etc

9. RESEARCH TEAM AND SUPERVISION

It is crucial to understand key aspects related with the research team which was involved in the execution of the TAM study.

- **Interviewer/facilitator(s) who conducted interviews and FGDs**

Field level interviews were undertaken at three levels. The interviews with the higher officials (DMHO and Project Director, ICDS) were undertaken by TAM monitors and study experts and the sub-district officials interviews (SPHO, CDPO) were undertaken by TAM monitors and/or TAM supervisors. Interviews of *Mandal* level officials (MO, Supervisor from ICDS Scheme and Health) were undertaken by field leads. The last level of interviews i.e. FLHWs and AWWs were undertaken by field supervisors. As part of the monitoring mechanism, TAM supervisors were randomly present for field level interviews. The FGDs with ASHAs were undertaken by the field team leads wherein TAM supervisors were present as observers.

- **Credentials of the researchers involved in study's execution**

There were two sets of field teams involved in undertaking the study. The team from TAM/CES comprised of researchers with backgrounds of M.Phil in Public Health and Masters in Social Work (MSW), whose role primarily was to interview senior officials and supervise the field data collection team. Another set of the field team, comprising of observers and supervisors, had members with Bachelors and Masters degrees in social sciences along with work experience in the social sector. Researcher with M.Phil in Public Health also took lead in drafting of all technical documents related with the study (protocols, study tools, technical reports etc.) and time to time improvisations of the same. This was done with close guidance from senior technical committee members and thematic expert empanelled for technical guidance.

- **Gender of researchers and field team members**

The TAM study was planned, executed and managed by a female researcher. Rest of the supervisory and field staff members were all males. Gender did not prove to be an obstacle in the field as was evident through various rounds of field visits in the formative phase of the study and the pilots undertaken.

- **Experience and training of the research staff**

The manager of the study came with diverse experience in public health across a range of issues, target groups and settings. She had practiced both in applied health research and programmes. The team comprised of two research associates. While one of them had field level grassroots experience in health across AP and TS, the other research associate had experience in programmes, social research and data management. Thus, the specified team composition had given a rich blend of practice and knowledge to the TAM study with timely inputs from esteemed experts who were a part of the TAC committee. The TAC committee for the study comprised of multi-disciplinary professionals with diverse knowledge and experience across a range of areas like Public Health, Statistics, Research, Medicine, Social Sciences etc.

- **Training of field team**

Training was provided through three days of intense classroom training and two days of field testing in Kandi PHC, Medak District where the pilot study was also conducted. It is crucial to note here that field supervisors and field observers were trained together on all days of the training except for the technical session on '*conducting interviews and ethical aspects*' on the 3rd day which was solely meant for the field supervisors. During the classroom training theoretical sessions covered the following aspects:

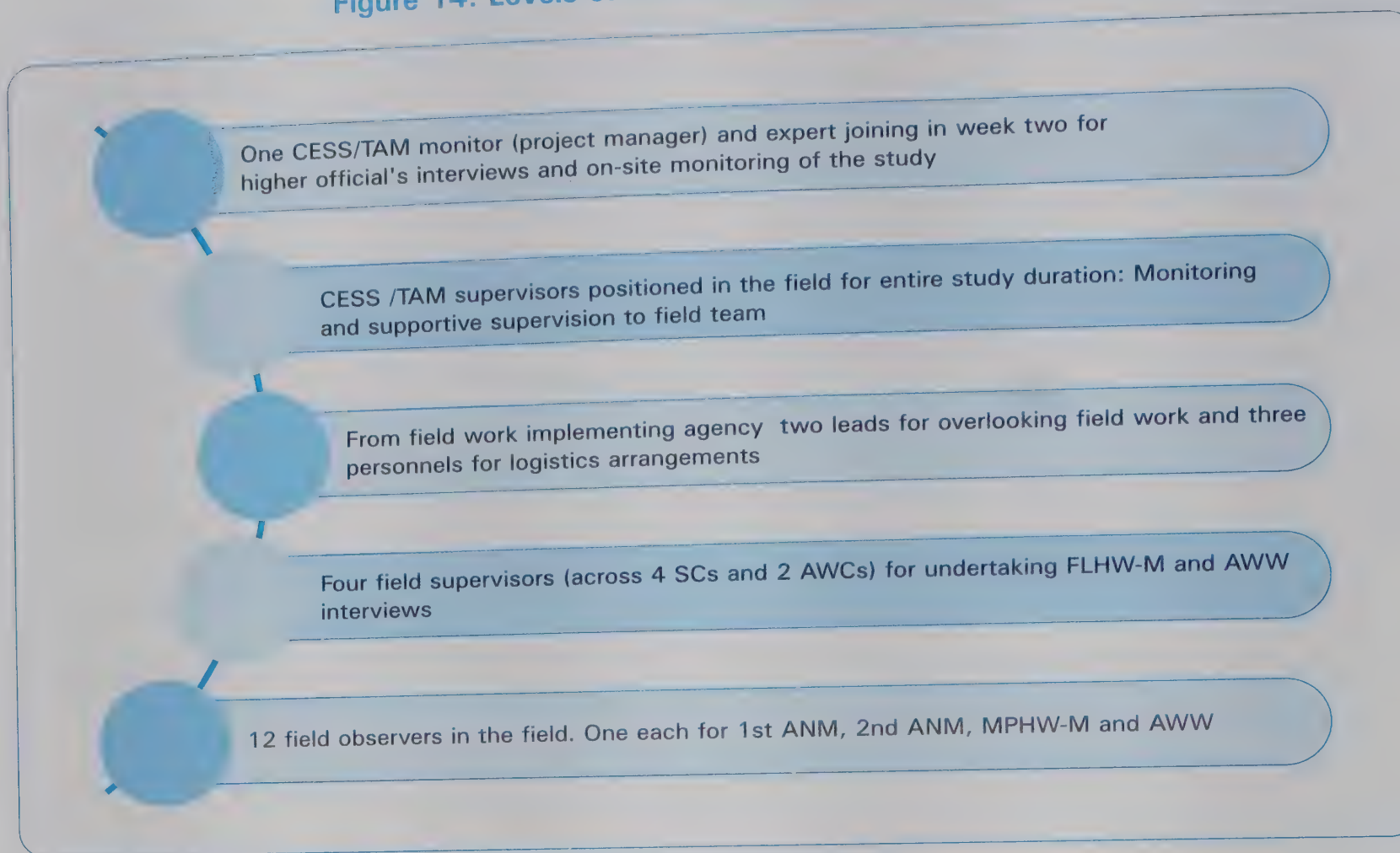
- ✓ Who are FLHWs, AWWs and ASHAs?
- ✓ What are their job functions?
- ✓ District health service system structure.
- ✓ Orientation about TAM research study methods: Interviews, Observations and FGDs.
- ✓ Detailed session on each of the tools including mock sessions for practice.
- ✓ Ethical aspects to be considered in the study.

Further details about the field team training are discussed in the TAM Study Process document.

- **Supervision and monitoring of data collection:**

There were a total of 12 observers recruited for the study with 1:1 ratio. Observers were divided into four core teams with specific FLHW/AWW allocation at the SC level with one field supervisor allotted for each SC. This enabled stringent direct field level monitoring and trouble shooting. There were two core leads supported by a logistics team in order to carry out field operations smoothly (Figure 14). In the rare situation of the observer falling sick or on leave, the field supervisor(s) replaced observer(s) in the field on that particular day.

Figure 14: Levels of field monitoring of TAM study



10. DATA MANGEMENT AND ANALYSIS

- **Data quality checks:** The software had menu driven options so as to avoid wrong entries with in-built quality checks. The entries in the tablet were also randomly cross-checked with the field notes maintained by on-field supervisors. At the end of each day, the data on the tablets was synced with the online server so as to enable live viewing by the study team based in Hyderabad. The review was done on the following day of each of the observation days. Under circumstances of no internet availability syncing was done as soon as connectivity was regained. Every day's entries were then randomly cross checked at the end of the day with respect to GPS co-ordinates for movement, time logs and completeness of the data entry. Queries that emerged were communicated with the field work executing agency. In the last District Khammam, two public holidays fell during the TAM study. On account of the logistical feasibility of winding up field operations, it was decided to construct the worker's day based on recall method of the same days from the previous week. This was recorded by paper pen writing and then transferred into to online data sheets. Field supervisors did the same for all the workers and the same entries were uploaded on the web

Qualitative data was checked in two ways. Firstly, during the fieldwork, TAM supervisors randomly checked the notes maintained by the field supervisors from the field work executing agency. On a random basis, across SCs and cadres, they also attended interviews. Secondly, transcripts received in English for FGDs and interviews were randomly cross checked against voice recordings done in Telugu. Wherever recordings were not done information was cross checked with respective field notes and interview forms. Queries that emerged were communicated with field leads for clarifications.

- **Management of data and analysis:** The TAM study comprised of both qualitative and quantitative data. Quantitative data obtained from direct continuous observations was

analysed for time duration per worker per day and, per week for each of the clusters in a district and total time consumed across the two clusters in a district. Stratification was done for the districts and tribal and non tribal clusters. Observation data was analysed and presented for each of the cadres across the three districts.

Interviews with FLHWs and AWWs yielded data which was both quantifiable and qualitative in nature. Section- 1 gave socio demographic information which was presented descriptively across the three districts for each of the cadres. Variations, if any, were mentioned. Section- 2 yielded open ended responses which were free listed using Anthropac (Figure 15). It gave the frequency and rank of responses and Smith's score value. Smith's S (Smith's saliency score) refers to the importance, representativeness or prominence of items to individuals or to the group, and is measured in three ways: word frequency across lists, word rank within lists and a combination of these two. Data was presented descriptively enlisting Smith's S value and ranks across responses for the three districts and variations, if any, were noted down. Section- 3 was close ended and yielded responses which were quantifiable. Questions were asked about aspects such as health status in reference with field and facility level functioning, work satisfaction, work planning, supervision etc., with choice of responses on a *Likert* scale. Percentages were determined and representation was done using pie charts and bar diagrams, wherever applicable.

Interview data for AWWs and MPHWS-M across three districts is presented as totals only (free list tables and Section- 3) because of the fewer number of participants. There were a total of only 12 AWWs and six MPHWS-M across the three districts. Variations, if any, were noted.

The FGD data was manually coded and categorised under broader and sub-themes as emerged from the data. Three code books for three districts were prepared noting down variations. Similarly, qualitative data from official's interviews was manually coded and analysed for emergent broad and sub-themes.

Qualitative data analysis for the ASHAs FGDs, ANMs FGD and official's interviews was accomplished by a total of three data coders from the study team at CESS. For manual coding, two of the three team members prepared code sheets and the third person as a neutral individual finalised the code book (Figure 16).

Quantitative data was managed and analysed in Microsoft Excel files. Qualitative data was managed through word documents. Input files from qualitative data were generated in notepad format in order to run it in the Anthropac software.

Figure 15: Free-listing data analysis process for FLHWs and AWWs interviews

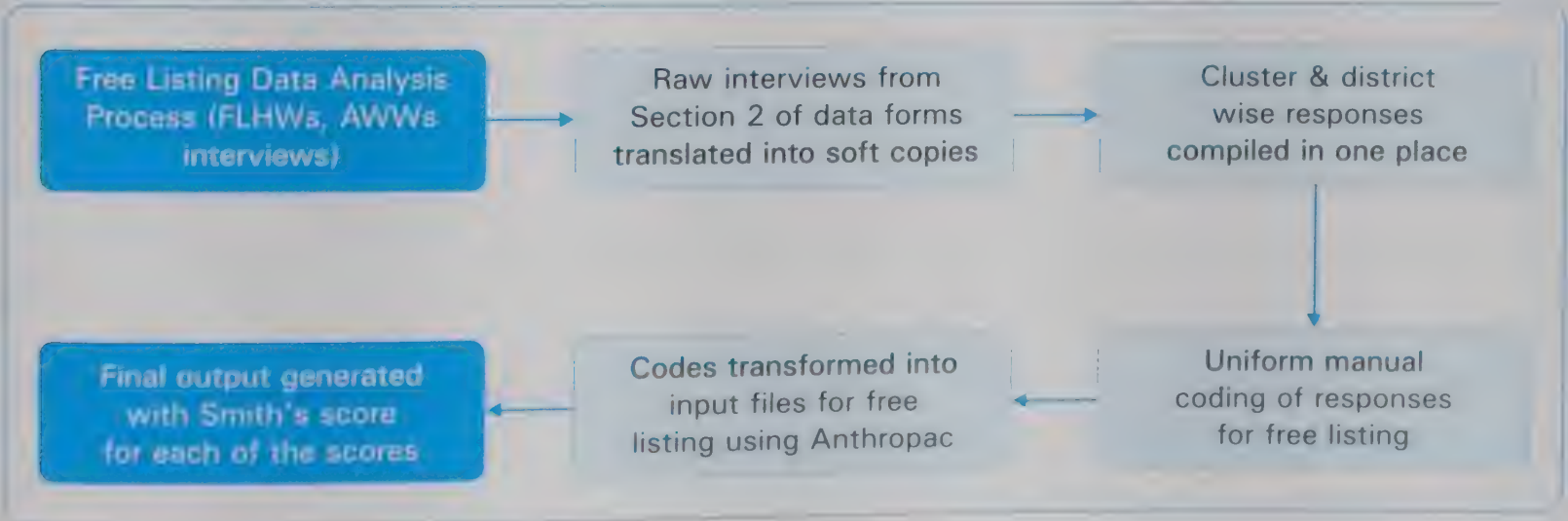
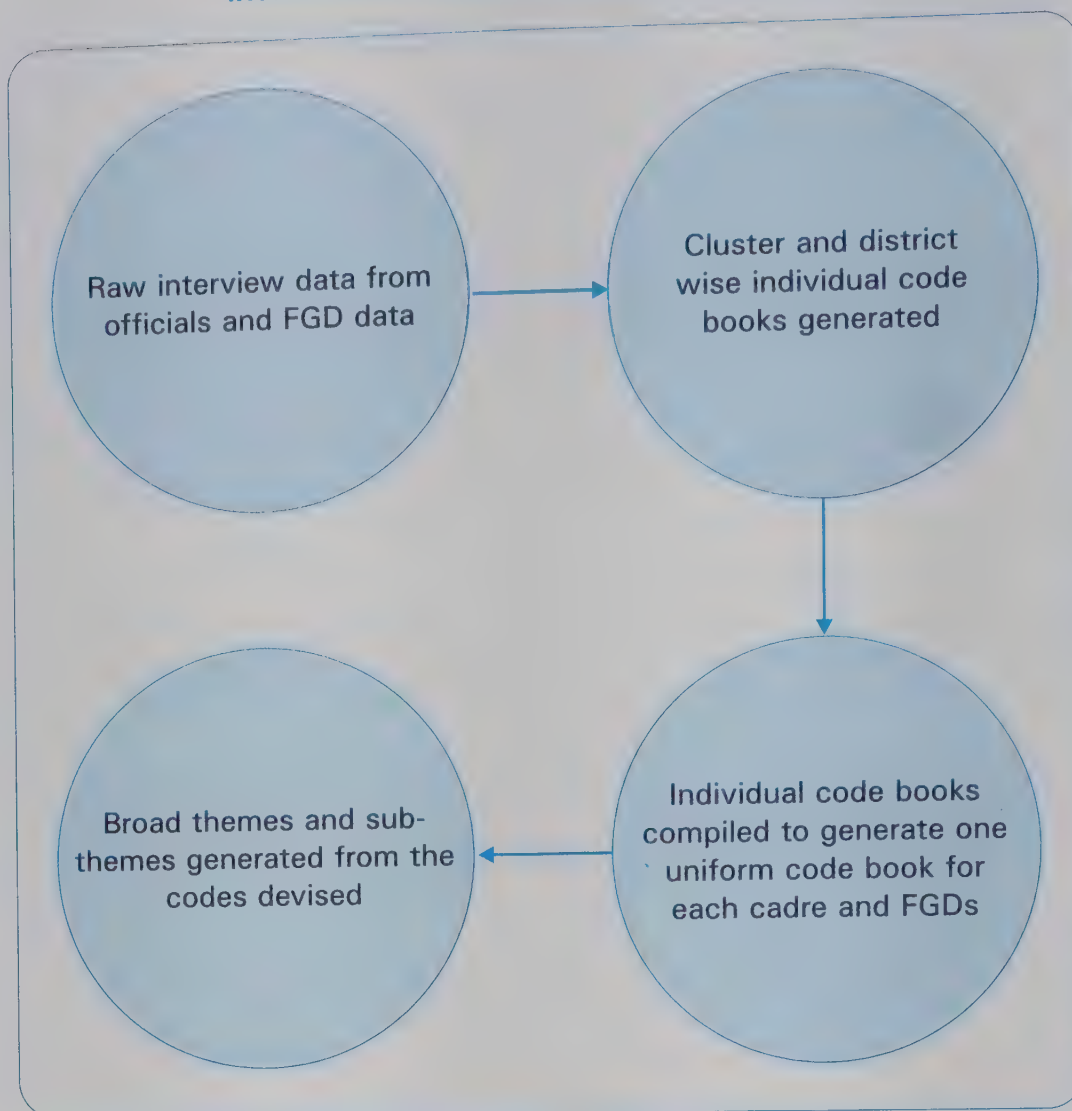


Figure 16: Thematic coding process for official's interviews, ASHA FGDs and ANM FGD



11. STUDY STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS

Strengths

The TAM study was a vast study with some key strengths listed below.

- In-depth literature review coupled with field visits with inductive observations helped in developing the observation's checklists for TAM.
- Deductive approach in TAM observations helped in better management of data
- Complemented by interviews and FGDs
- Variations factored in tribal and non tribal clusters and three different regions across AP and TS
- Use of GPS enabled technology
- Three levels of supervision
- Data quality checks at multiple levels
- Expert TAC committee and thematic experts for continual guidance
- Programme oriented interpretations
- Including ASHAs as part of the study as they are key to the functioning of FLHWs
- Including AWWs, ICDS; co-ordination between health and ICDS peripheral workers explored

Weaknesses

The TAM study did have certain limitations which are described below

- Hawthorne effect- Direct observation may have led to modification in work schedules and performance. However, this is likely to reduce by the end of two to three days of initial observation.
- Only male observers - However, there was no discomfort mentioned by the study participants.
- A few workers were uncomfortable in the observers following them from house to centre to house. In that case, the worker telephonically reported the time when she/he started/reached home to the respective observer and it was recorded.
- Malfunctioning of some of the tablets in the initial stages of data collection. This was addressed by the conventional method of paper pen recording which was translated on the same day into soft copies by leads from the data management team. It only happened two to three times in the very first district – Srikakulam.
- The GPS location was not visible at times because it was programmed to note the location at every fifth activity. However, that was enough to monitor data collection and movement of the FLHWs.

Opportunities

- Interviewing the best practices from the field. For example awarded ANMs and their supervisors were interviewed to better understand the work scheduling.
- To develop a model work plan for FLHWs and AWWs
- To identify policy implications and interventions for better performance or redefining job responsibilities.

Threats

- Any punitive action against FLHWs, AWWs and officials if the findings were not positive. Effort was made throughout to maintain anonymity. A decision was made to report averages of time spent; frequency of responses from the observation data and report only the key findings without mentioning any individual's name in the report or individual feedback to the officials. Since the field area is small with selected number of PHCs so it may still be easy to identify some participants.

12. ETHICAL CONSIDERATIONS

The TAM study has been executed with due permission from the state and district authorities. Yet there were certain ethical aspects which were duly considered during the study at all the stages.

- Informed consent was taken before any observation and interview was started. Participants were duly informed about the study's purpose and the process. Interviews were recorded and photographs were taken if and only if respondents gave permission to do so.
- Participants were given the right to withdraw at any point in time during the study.
- Towards the end of the interview, the recording was replayed for them to hear and make corrections (if required).
- The confidentiality of respondents was ensured. Personal identifiers were deleted after data management. Only Id numbers were used for linking information.
- Data was kept strictly confidential and accessible only to the TAM research team at CESS.

5. FINDINGS FROM THE FIELD

As discussed in detail in the Unit on Methods, the TAM study used a mix of methods to collect data across a range of participants i.e. FLHWs, AWWs, ASHAs and officials. Direct continuous observation of ANMs, MPHWS-M and AWWs was done for a span of six days in each of the sample PHCs. The same set of participants was interviewed in order to contextualise their recorded time utilisations. ASHAs were not observed instead FGDs were conducted with them. Since they are voluntary workers at the village level undertaking a time motion study for ASHA was not feasible due to their mode of work. A FGD with ANMs was also undertaken in one of the sample districts (Khammam; Tribal cluster PHC Singareni) with ANMs from SCs which were not part of the TAM observation study. A FGD with ANMs was undertaken post the TAM and qualitative interviews. Based on analysis from qualitative interviews of ANMs across the three study districts, FGDs was undertaken in order to better understand a few of the emerging aspects from analysis and reconfirm the same. Moreover, officials from the district, sub-district and *Mandal* level were interviewed in-depth in order to understand their perceptions and suggestions about the patterns of time utilisation by FLHWs, AWWs and ASHAs.

In the present Unit, findings from the TAM study are presented in Part A and Part B. Part A presents findings for FLHWs (ANMs: Section 5A, MPHWS-M: Section 5B), ASHAs (Section 5C) and officials from the health department (Section-5D). Part B presents findings for AWWs (Section 5E) and officials from the ICDS Scheme, WDCW Department (Section 5F). Time and motion observations for participants have been presented along with qualitative findings.

In total 43 ANMs, six MPHWS-M (from Srikakulam and Chittoor only, since no MPHWS-M were found in sample PHCs of Khammam) and 12 AWWs were included in the TAM study. Each of them was interviewed. The interview responses from FLHWs and AWWs covered a range of themes spanning facilitative factors and challenges which they faced, in terms of a) work performance, b) management of time, c) record keeping, d) supervision, e) meetings, f) physiological aspects and g) trainings etc. Along with findings from interviews, findings from ANMs are also presented.

PART A - HEALTH DEPARTMENT

5A. ANM FINDINGS

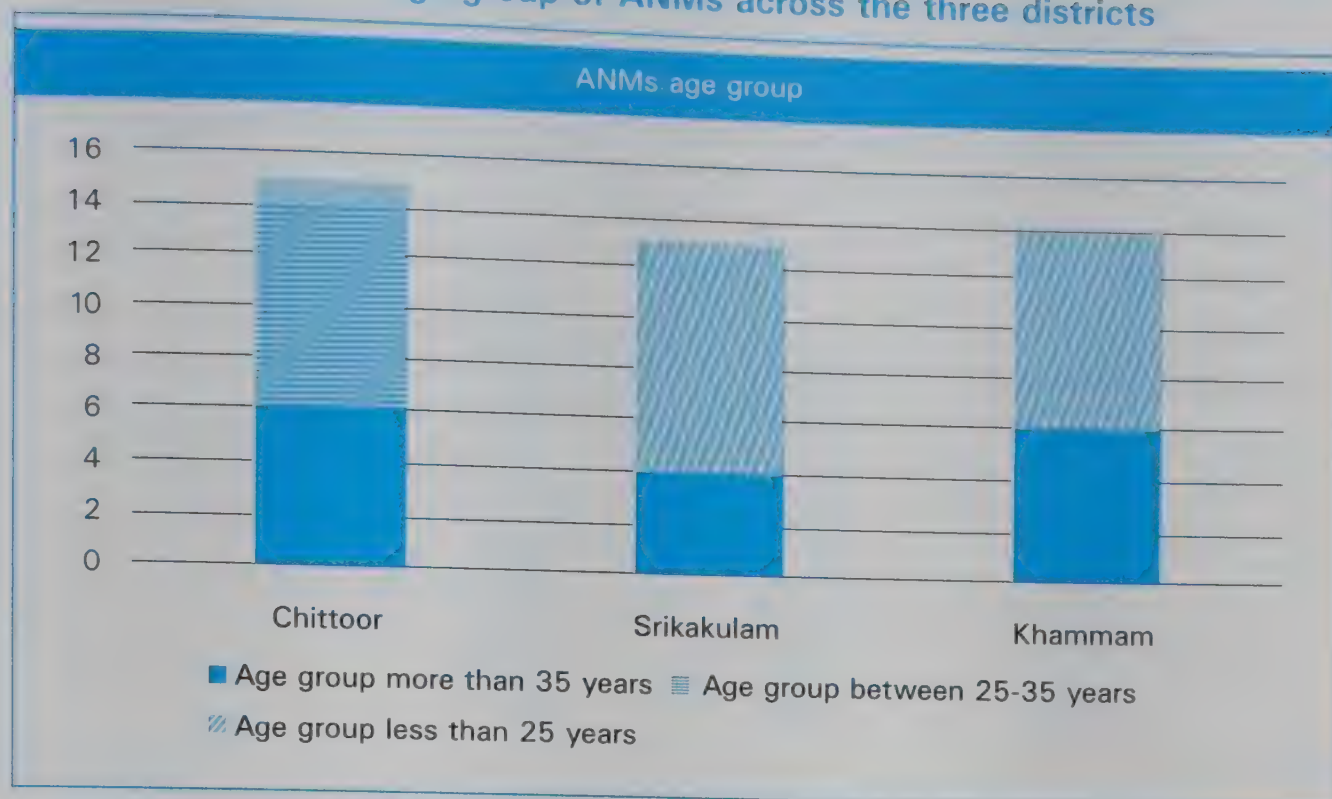
I. SOCIO-DEMOGRAPHIC INFORMATION

1. AGE GROUP

More than half (24) of the 43 ANMs in the study districts were in the age group 25-35 years (Srikakulam, nine of 13; Chittoor, eight of 15; and Khammam, nine of 15) (Figure 1). One ANM in Chittoor, was aged <25 years and six ANMs each from Chittoor and Khammam and four from Srikakulam were in the age group of 35-45 years.

It was observed across study districts, that the 1st ANMs were usually older, by virtue of their years of service, than 2nd ANMs who were contracted under NRHM just a few years back.

Figure 1: Age group of ANMs across the three districts



2. EDUCATION LEVEL

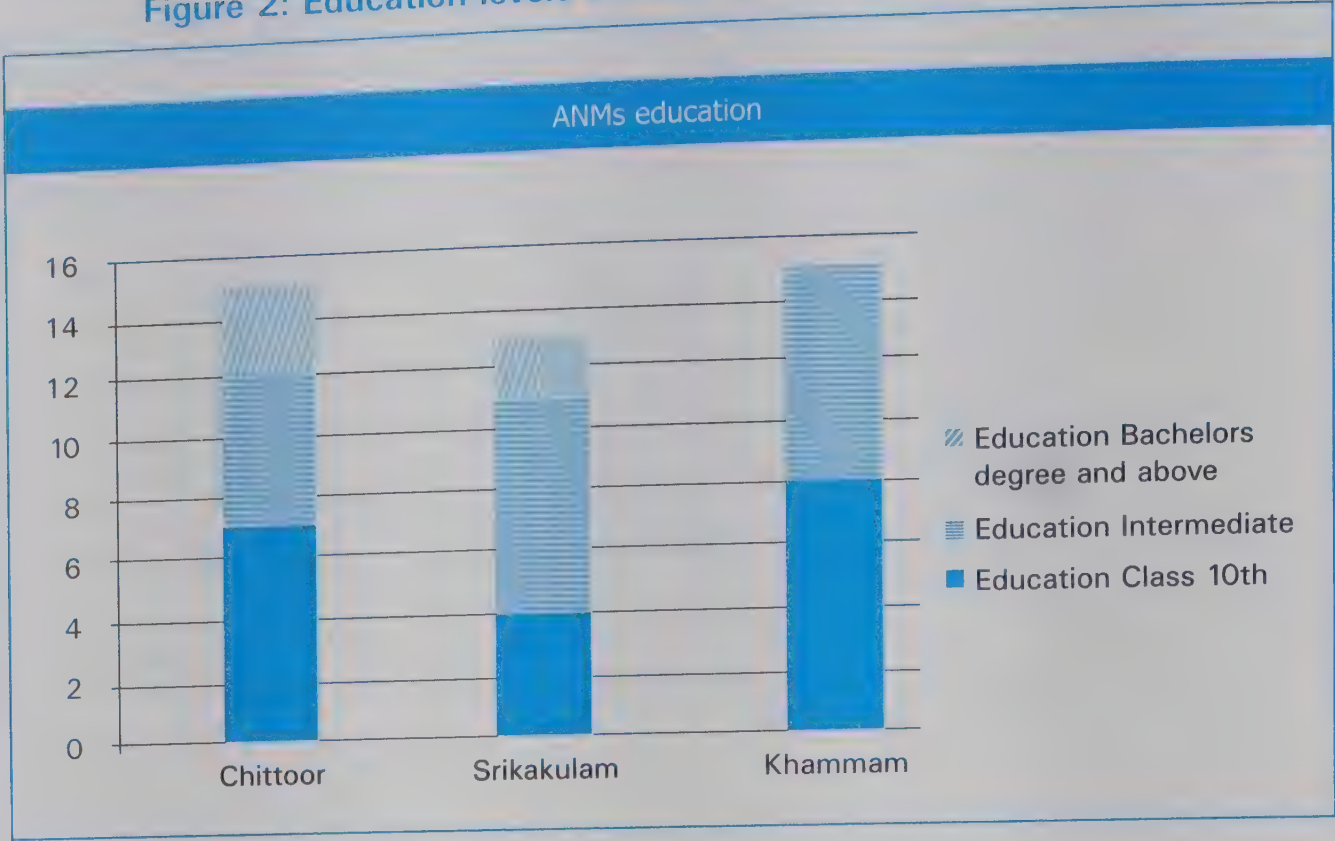
All the ANMs in the three districts were educated up to the minimum eligibility criteria of high school followed by the 18 month diploma for the ANM course (Table 1, Figure 2). Across districts, the 1st ANMs had completed their course about 15 years back and the 2nd ANMs had completed their course about six years back.

Table 1: Education level of ANMs across the three districts

Education level	Srikakulam	Chittoor	Khammam
High school	04	06	08
Till intermediate with science	07	07	07
Graduation or above	02	02	None
Total	13	15	15

All ANMs from Khammam, had finished the ANM course, also known as the MPHA-F (Multipurpose Health Assistant-Female) course, between 1991-2008 while in Chittoor the course had been completed between 1993-2008. In Chittoor, two of the ANMs from the non tribal cluster PHC (Daskuppam PHC, Satyavedu cluster) had done additional courses like the Lady Health Visitor (LHV) training⁷ and the General Nursing Midwife (GNM) course. An ANM said that in spite of finishing the LHV training three to four years back she was still awaiting the promotion.

Figure 2: Education levels of ANMs across the three districts



3. FAMILY TYPE AND MARITAL STATUS OF ANMs

A total of 36 ANMs were married (Srikakulam 10; Chittoor 13 and Khammam 13), three were widows (one in each of the districts), three were unmarried (one in each of the districts) and one was a widow in Srikakulam District. The type of family the ANMs lived in is represented in Table 2.

Table 2: Family type of ANMs from the three districts

Family type	Srikakulam	Chittoor	Khammam
Nuclear	08	12	12
Joint	05	03	03
Total	13	15	15

⁷ LHV training is given by the government based on ranking in the promotion list. It is a mandatory requirement to be promoted to health supervisor.

4. PLACE OF RESIDENCE AND MODE OF TRANSPORTATION

4.1 Place of residence

In the non tribal cluster PHC from Srikakulam District; all four SCs under the study were operating from rented buildings. Three ANMs out of a total of seven in this PHC area were living in rented SC buildings (Borivanka, BG Puttuga and Kusumpuram) while the remaining four were residing in private localities. In Srikakulam’s tribal cluster PHC , all four SCs were

operating from government owned buildings. As shared by ANMs, none of them were staying at the SC mainly because of unliveable conditions and remoteness of the health facility, which was unfit for their family requirements. Neither were there basic facilities like water, electricity nor facilities like schools, good connectivity etc. which were important to their family members. Moreover, it was reported that the SCs were located in interior areas which were inconvenient for ANMs and their families. These ANMs, mostly used auto rickshaws, government buses, two wheelers or walked to the SCs for their outreach activities in villages.

In Chittoor District, the sample SCs from the non tribal cluster PHC (Daskuppam PHC, Satyavedu cluster) did not have ANM quarters attached to the SCs. All ANMs used public mode of transport (buses and autos) to commute to the work place. The K.N. Peta SC was operating from a rented building and the other two SCs, Ambakkam and Dasukuppam, from AWCs. However, in the other non-tribal cluster PHC (TV. Palli PHC, P. Kothakota cluster), the Rajanna Trust was constructing / renovating SC buildings and residential quarters. The Trust was given the responsibility for providing all the facilities in the quarters and SCs. In this PHC, one ANM used her personal two wheeler to commute, while all the others used public modes of transport (buses and autos).

In Khammam District, in the non tribal cluster PHC, two ANMs were staying in the SC quarters at Mudigonda and Venkatapuram. While Mudigonda SC was operating from a rented building, Venkatapuram SC was being run from a government owned building. In Banapuram SC, though quarters were available but as the ANMs reported and it was also observed, there were no basic facilities like water supply and electricity. Thus none of the ANMs here were residing in the quarters provided. The ANMs from the second PHC, Singareni PHC, stayed in private localities. Across both the PHCs, auto rickshaws and buses were the major mode of transportation for ANMs.

Thus, out of a total of 43 ANMs, only five were staying in SC quarters (2 ANMs in Khammam, 3 in Srikakulam and none in Chittoor).

4.2 Mode of transportation

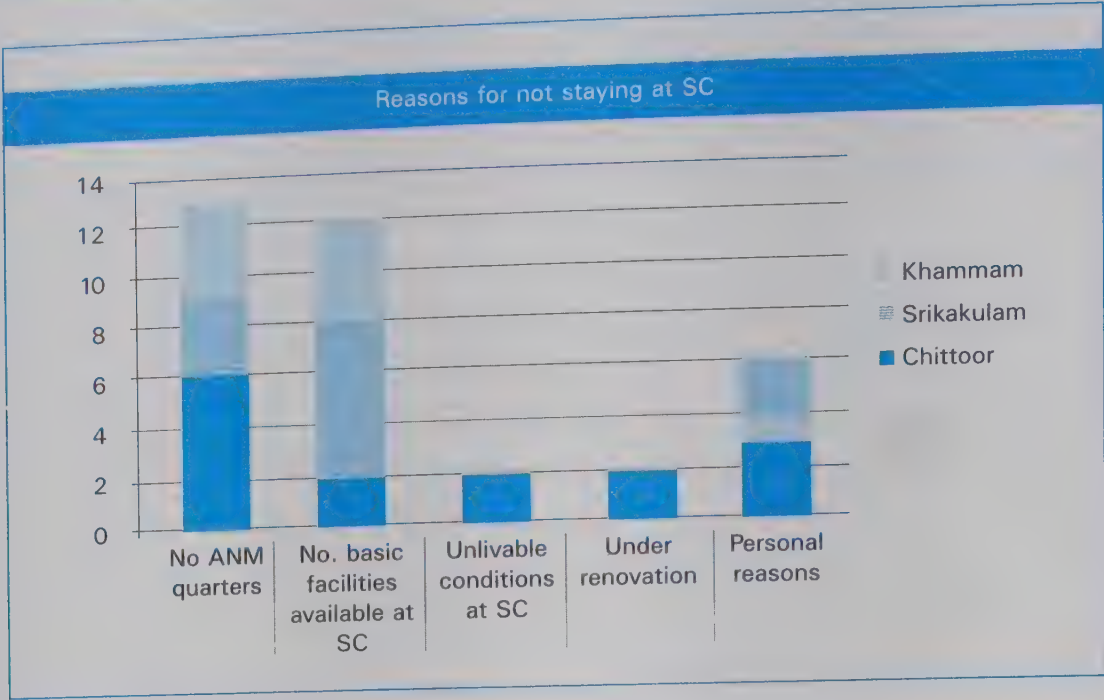
ANMs in Khammam District, shared during interviews that they walked through the allotted villages as there was no regular transportation facility. During special days like Immunisation Day and emergencies, the ANMs took the help of their family members (mostly husbands) to reach the SC or villages. At times villagers also helped in dropping the ANMs to the SC and the villages.

Infrastructure was found to be a major problem across SCs of the first non tribal cluster PHC (Daskuppam PHC, Satyavedu cluster) in Chittoor District. Most of the ANMs were not residing close to the SCs either due to non-availability of quarters, or non-conducive living conditions or personal and family choice.

Transportation to SCs and to the field was largely an issue which was further complicated by distant place of residence and the local terrain. Tribal cluster PHC of Srikakulam District comprised of hilly remote terrain with scattered tribal hamlets adding to the challenges faced by ANMs in accomplishing their work. During emergencies they took help from their family members (mainly husbands) to travel.

The various reasons corresponding with the number of ANMs who gave the same reasons is presented in Figure 3.

Figure 3: Reasons quoted by ANMs across three districts for not staying at SCs



II. TIME UTILISATION BY ANMs WITH FACILITATING FACTORS AND BARRIERS TO TIME MANAGEMENT

Findings have been presented for the ANM cadre across the three districts, listing variations wherever applicable.

To quantify time utilisation, direct continuous observation of FLHWs was undertaken across the three districts in each of the selected sample PHCs. As explained in the Chapter on Methods, in the situation of multi-tasking, the primary activity was considered for recording the time.

A total of 43 ANMs (13 from Srikakulam, 15 each from Chittoor and Khammam) were observed for a span of six days each (Monday to Saturday).

If any day of observation was missed, it was covered in the following week with the same worker on the same day of the week. The only exception was two sample PHCs of Khammam District where days were missed due to public holidays, 24 September 2015 (*Eid*) and 2nd October 2015 (*Gandhi Jayanti*). Here, because of logistic reasons, the conventional method of paper pen writing was used in order to construct the worker’s typical day (this was the method used originally in the TAM study undertaken in Gujarat by Prof. Mavalankar and team). This was done for all the workers under study for those days. One ANM who fell sick for three days was also observed using this approach in the non tribal cluster PHC of Khammam District.

The details of the findings that emerged through the TAM observations are presented below for the ANM cadre in three key ways: across the days of the week, across the 1st ANM and 2nd ANM cadre and across tribal and non tribal clusters. Time is represented per week per ANM through range, median with inter-quartile range (IQR) and total in minutes.

Note: Time is estimated for minimum, maximum, median and IQR in hours or minutes. If the ANM was not doing any activity then for that activity her time was taken as 'zero' and accordingly minimum, maximum, median and IQR were estimated. However we have also reported the average time spent on the activity for the ANMs who did the activity. The time is variations. As the times spend on categories and sub-categories were small, they have been reported in minutes.

1. AVERAGE TOTAL TIME SPENT ON JOB AND TRAVEL

The median time spent from home to home (including service delivery and total travel) by an ANM on any day was 8:04 hours with 8:09 hours recorded in non tribal PHCs and 7:58 hours recorded in tribal PHCs. On any given day ANMs travelled more than two hours in total, which actually left them with limited amount of time for the day's activities. Half of the time was spent on travel from home to workplace and back and the other half in travelling to the field and within the field. Many a times, to save time, ANMs directly went to the field from their homes rather than going to the SC or PHC and then the field. Thus, effectively an ANM could work for only 5:52 hours (IQR, 4:45-6:44). Table 3 (and Figure 4 a, b, c, d) describes the time distribution on the job and work for the ANMs.

It was observed that in tribal areas, the ANMs left their centres early due to safety concerns and rainy weather (monsoons had set in tribal cluster of Srikakulam at the time of data collection). The ANMs from tribal areas were also travelling for about 40 minutes longer from their homes to the place of work and back. In the sample PHCs located in the tribal cluster, ANMs effectively got only median 5:01 hours per day for programmatic and programme supportive functions including time incurred in waiting and personal work. However, in the sample PHCs of the non-tribal clusters ANMs had median 6:06 hours of time on work which was 1:05 hours more than ANMs in tribal clusters. Within the field travel time (median) incurred was the same for tribal and non tribal PHCs. This was despite the fact that field locations in one of the tribal PHCs, were in very hilly and inaccessible terrain (tribal cluster PHC from Srikakulam). This suggests that ANMs travelled for about only a certain duration of time (irrespective of the terrain) and the villages that are far from the centre and difficult to reach are either missed or require a whole day's dedicated time to capture.

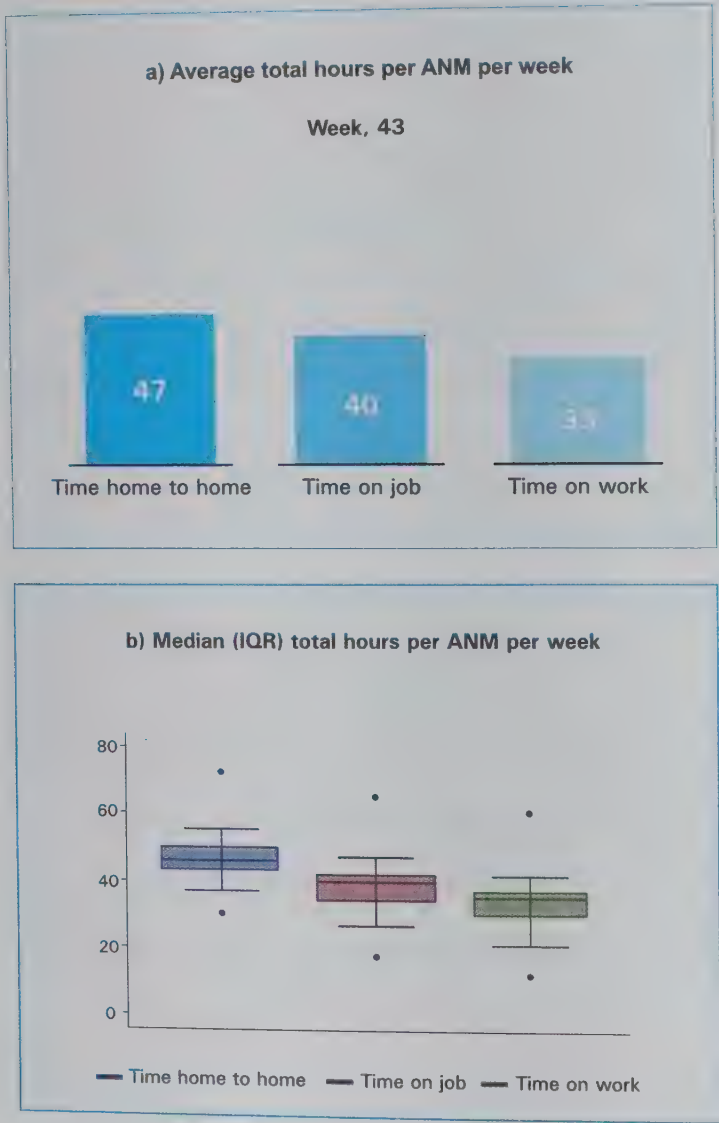
For the 1st and 2nd ANMs median time spent on the job per day was almost equivalent (6:54 hours and 7:09 hours respectively). Median time spent on within field travel was also similar for the 1st and 2nd ANMs (0:57 hours and 1:07 hours respectively).

It was interesting to note that overall time spent from home to home is about eight hours, even with stratification with terrain and type of ANMs while time on job varies between 6:20 hours to 7:10 hours. As observed and shared during interviews, ANMs were largely staying in private accommodation away from SCs (only five of the 43 ANMs stayed in quarters attached to the SC). This has also added up to travel time incurred by ANMs from home to health facility or field and return. None of the ANMs from the tribal PHCs lived in the SC premises and one of the ANMs in Khammam had her home as far as 47 kilometres away.

Table 3: Time in median hours per day per ANM from home to home (N = 43; hh:mm with range in brackets)

Particulars	Total	Non-tribal PHC	Tribal PHC	1 st ANM	2 nd ANM
Time on job (including within field travel)	7:00 (6:08-7:31)	7:10 (6:27-7:42)	6:20 (5:16-7:09)	6:54 (6:00-7:20)	7:09 (6:12-7:57)
Work time	5:52 (4:45-6:44)	6:06 (5:11-6:48)	5:01 (3:49-6:25)	5:54 (4:54-6:40)	5:49 (4:35-6:49)
Within field travel	1:02 (0:36-1:36)	1:02 (0:38-1:37)	1:02 (0:25-1:42)	0:57 (0:30-1:25)	1:07 (0:39-1:52)
Travel from home to work place (SC or PHC and/or field) and work place to home	1:04 (0:36-1:36)	1:00 (0:32-1:26)	1:37 (0:58-2:06)	1:12 (0:37-1:41)	1:02 (0:37-1:29)
Grand total	8:04 (7:18-8:49)	8:09 (7:30-8:48)	7:58 (6:53-9:00)	8:04 (7:02-8:37)	8:01 (7:25-9:00)

Figure 4: Time spent by ANM from home to home, on job and on designated work in hours



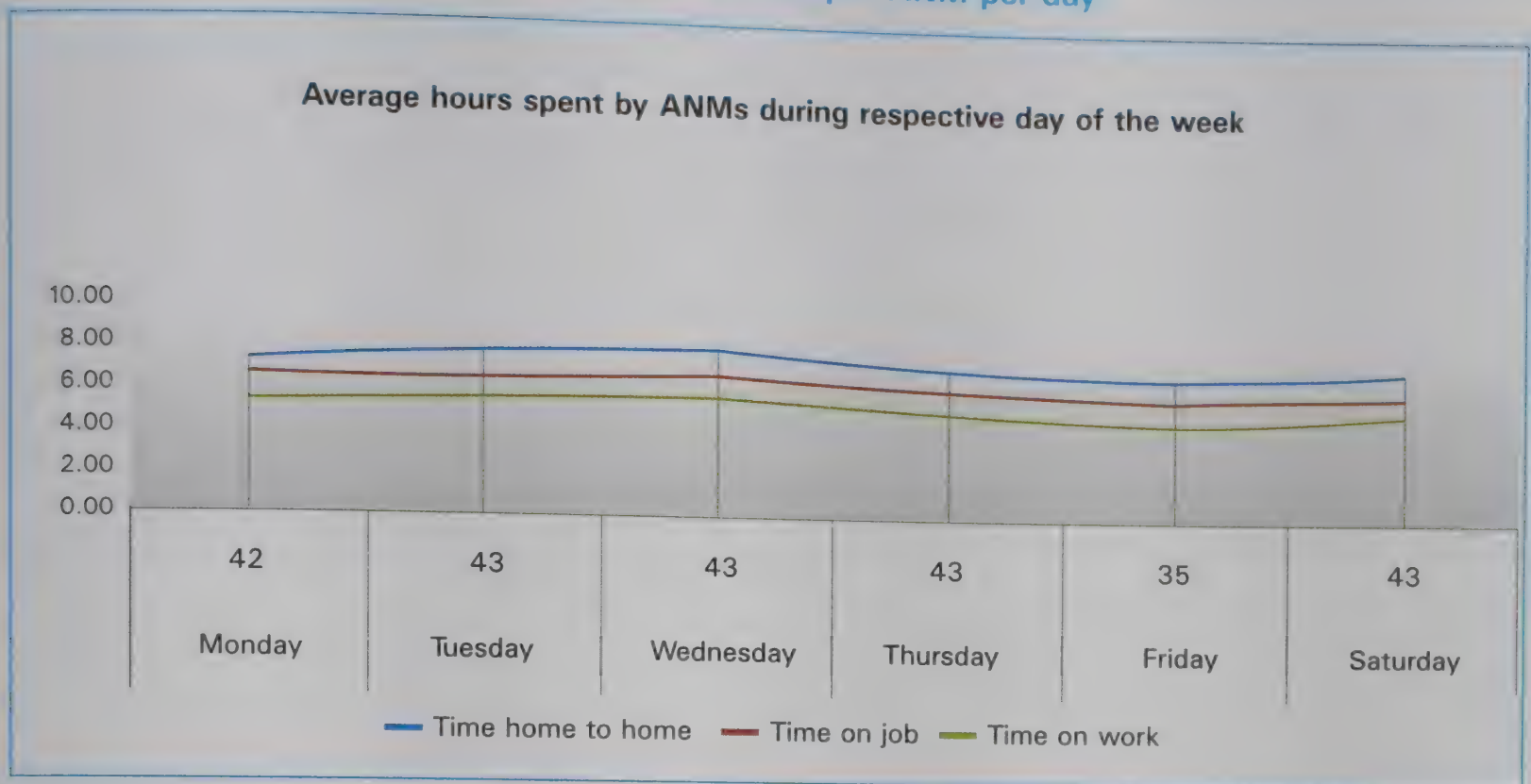
ANM

The median time spent from home to home by an ANM on any day was 8:04 hours with 8.09 hours recorded in non-tribal PHCs and 7:58 hours in tribal PHCs. On any given day ANMs travelled more than two hours in total which actually left them with limited amount of time for day's activities.

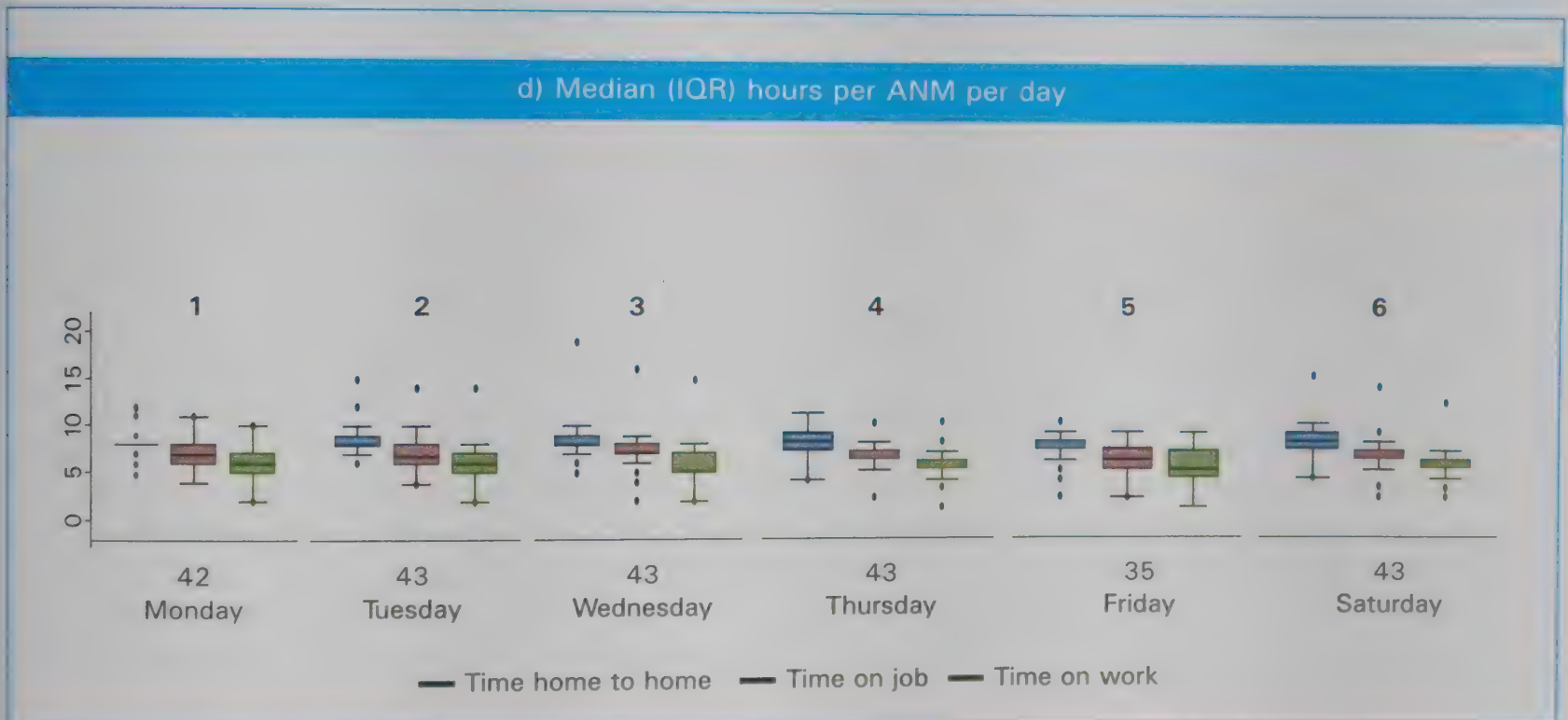
Effectively ANM could work for only 5:52 hours (IQR, 4:45-6:44). Non-Tribal – 6:06 hours (IQR, 5:11-6:48) and Tribal – 5:01 hours (IQR, 3:49-6:25).

Average and median working hours were more on Wednesdays and Thursday and least on Fridays and Saturdays.

c) Average total hours per ANM per day



d) Median (IQR) hours per ANM per day



2. TIME SPENT IN A WEEK ON VARIOUS CATEGORIES AND SUB CATEGORIES OF ACTIVITIES

The Tables 4 and 5 (and Figure 5) below show the time spent in the various broad and sub categories of activities carried out by ANMs in total and across weekdays. Activities have been identified as programmatic activities, programme supportive and others areas. The ANMs did not have well defined lunch breaks and these were often clubbed with field or centre-level activities, or personal work, thus they are not separately mentioned. It was clearly observed that they did not take out a designated time for lunch break.

In the short period of observations the non-routine activities in the ANMs work schedule was observed for e.g. training on using tablets for MCTS⁸ record keeping in Srikakulam and *Missio Indradhanush Survey* in Khammam, which certainly would have had reduced the time spent in some categories.

Programmatic activities: Median time spent by 43 ANMs on the programmatic component of activities was 1358 minutes with a quarter of the ANMs spending less than 1248 minutes and other quarter utilising more than 1621 minutes in a week. Average total time spent by an ANM per week was 1441 minutes (minimum 742 minutes and maximum 2368 minutes in a week). Within programmatic, on direct service delivery, median time spent was more on Wednesday (157 minutes), Thursday (106 minutes) and Saturday (148 minutes). This is because these three days were core service delivery days wherein universal immunisation was organised at SCs on Wednesday, school health along with field outreach happened on Thursday and Saturday, which involved NHD along with field outreach comprising of home visits. Corresponding with the day's activities, ANMs spent very little time on records and reports writing on Wednesday and Saturday (median time spent recorded as 5 and 8 minutes only).

Programmatic support activities: ANMs spent median time of 518 minutes on programmatic support activities, which was little more than one fourth of the median time spent on the job by an ANM in a week. One-fourth of the ANMs spent less than 341 minutes while the other one fourth spent more than 670 minutes on these activities (Table 4). Only seven ANMs (from Srikakulam) were attending any training at the time of data collection thus median time spent on training across weekdays was recorded as zero. Those who attended training spent about 307 minutes in the week on training in MCTS tracking. All 43 ANMs were observed utilising their time in meetings/discussions with co workers or the village community, median 214 minutes (IQR 150-316 minutes). Multi-tasking by ANMs was common in the field and ANMs were often involved in meetings/discussions with co workers or the village community during their overall travel as well and that time is not accounted for in the estimates provided here. During one of many incidents experienced while accompanying ANMs travelling to tribal habitations up in the hill in the tribal PHC of Srikakulam, the ANM was engaged in talking with the villagers, giving them medicines along with a simultaneous discussion about the emerging seasonal epidemic cases with the other ANM. However, the median time spent on any given day in meetings/discussions with seniors has been hardly between seven to 15 minutes. Subsequently, interviews with ANMs reflected the importance of guidance received from seniors (MOs, supervisors) through meetings/discussions for improved field and/or facility level functioning because it enables them to plan better, device solutions for work related issues, mitigate technical ambiguities etc.

⁸ Mother and Child Tracking System (MCTS) is an initiative of the Ministry of Health & Family Welfare to leverage information technology for ensuring delivery of the full spectrum of healthcare and immunisation services to pregnant women and children up to 5 years of age. It is an innovative, web-based application, developed by NIC, to facilitate and monitor service delivery as well as to establish a two way communication between the service providers and beneficiaries.

Seventeen of the 43 ANMs were engaged with non-health but work related activities which mainly comprised of job activities which were outside her core job description as ANM and median time recorded was zero minutes (IQR 0-14 minutes). Of those who were engaged, the time spent ranged from two minutes to 121 minutes in a week. During the data collection phase ANMs, especially the 2nd ANMs, were mainly engaged in field level survey activities or outpatient duties at the PHC because of unavailability of staff nurses or at the medicine counter because the pharmacist was unavailable (and/or the position was vacant).

ANMs from the non tribal PHC from Chittoor, which was run under the PPP model, spent much less time in administrative and other work. They spent more time in programmatic functions compared to other non tribal PHCs from Chittoor or any other PHC studied.

Other work: Waiting time was recorded in reference with waiting for patients. The personal work sub-category was observed and recorded under a range of activities which ANMs accomplished like personal talk on phone with family/friends, lunch break, sitting and chatting with people, which was beyond the purview of the ANMs regular work etc. ANMs spent median 426 minutes in a week (IQR 335 – 484 minutes) on other work.

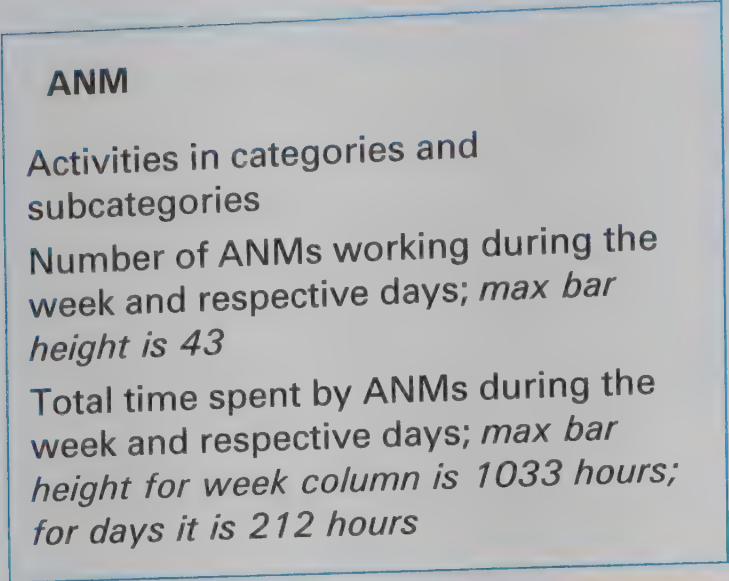
Table 4: Activities under broad categories as performed by ANMs across six days of the week, N =43 (in minutes)

Count gives number of ANMs performing the respective activity; Time for ANMs not doing activity was considered as 0 while computing Minimum - Maximum, Median (IQR); Average time was estimated per week for only those who performed the activity

Particulars	Total/week						Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
	Count N (%)	Range		Median (IQR)	Avg. Total / week / ANM	N (%)	median	N (%)	median	N (%)	median	N (%)	median	N (%)	median	N (%)	median	N (%)
		Min	Max															
Programmatic (sub-total)	43 (100.0)	742	2368	1358 (1248 -1621)	1441	42 (97.7)	260	40 (93.3)	263	43 (100.0)	304	43 (100.0)	244	33 (76.7)	215	43 (100.0)	258	
Direct service to beneficiary	43 (100.0)	234	1405	586 (439 -872)	664	38 (88.4)	58	30 (69.8)	83	43 (100.0)	157	43 (100.0)	106	27 (62.8)	44	38 (88.4)	148	
Records and reports	43 (100.0)	12	886	422 (236 -537)	386	38 (88.4)	104	35 (81.4)	50	25 (58.1)	5	33 (76.7)	41	24 (55.8)	30	29 (67.4)	8	
Travel to and within field* <i>*includes time spent on other undefined travel for work</i>	43 (100.0)	101	893	352 (289 -450)	391	37 (86.0)	60	30 (69.8)	39	40 (93.0)	64	40 (93.0)	64	28 (65.1)	64	42 (97.7)	57	
Programmatic support	43(100.0)	97	981	518 (341 -670)	523	42 (97.7)	78	43 (100.0)	67	40 (93.0)	61	43 (100.0)	76	35 (81.4)	64	41 (95.3)	72	
Trainings	07 (16.3)	0	331	0	307	0.0	0	0.0	0	0.0	0	0.0	0	7(16.3)	0	0.0	0	
Meetings/ Discussions with co	43 (100.0)	53	428	214 (150)	225	41 (95.3)	23	40 (93.0)	30	34 (79.1)	30	40 (93.0)	35	32 (74.4)	25	37 (86.0)	38	

Meetings/ Discussions with seniors	43 (100.0)	4	547	146 (90 -211)	157	31 (72.1)	10	30 (69.8)	15	27 (62.8)	9	26 (60.5)	7	15 (34.9)	0	27 (62.8)	8
Non-health but work related activities	17 (39.5)	0	121	0 (0 -14)	39	3 (7.0)	0	5 (11.6)	0	1 (2.3)	0	8 (18.6)	0	3 (7.0)	0	3 (7.0)	0
Administrative work	43 (100.0)	17	270	66 (39 -91)	75	38 (88.4)	16	31 (72.1)	10	31 (72.1)	9	30 (69.8)	5	24 (55.8)	6	25 (58.1)	6
Other work	43 (100.0)	220	787	426 (335 -484)	420	42 (97.7)	63	43 (100.0)	70	41 (95.3)	69	43 (100.0)	69	34 (79.1)	56	41 (95.3)	60
Waiting	36 (83.7)	0	210	59 (11 -114)	87	17 (39.5)	0	17 (39.5)	0	24 (55.8)	6	22 (51.2)	3	11 (25.6)	0	15 (34.9)	0
Miscellaneous: Personal work	43 (100.0)	79	520	307 (249 -365)	309	40 (93.0)	46	43 (100.0)	59	40 (93.0)	56	41 (95.3)	62	33 (76.7)	56	39 (90.7)	50
Others/ Uncategorised	22 (51.2)	0	333	2 (0 -52)	76	10 (23.3)	0	5 (11.6)	0	6 (14.0)	0	5 (11.6)	0	1 (2.3)	0	9 (20.9)	0
Grand total on job	43 (100.0)	1083	3948	2439 (2129 -2598)	2384	42 (97.7)	429	43 (100.0)	425	43 (100.0)	434	43 (100.0)	402	35 (81.4)	386	43 (100.0)	410

Figure 5: Number of ANMs and total time spent with respect to specific category and sub-category of activities



All ANMs devote time on programmatic, programmatic support and other activities during all days of the week. (Only 35 ANMs were observed on Fridays thus the bars are smaller)

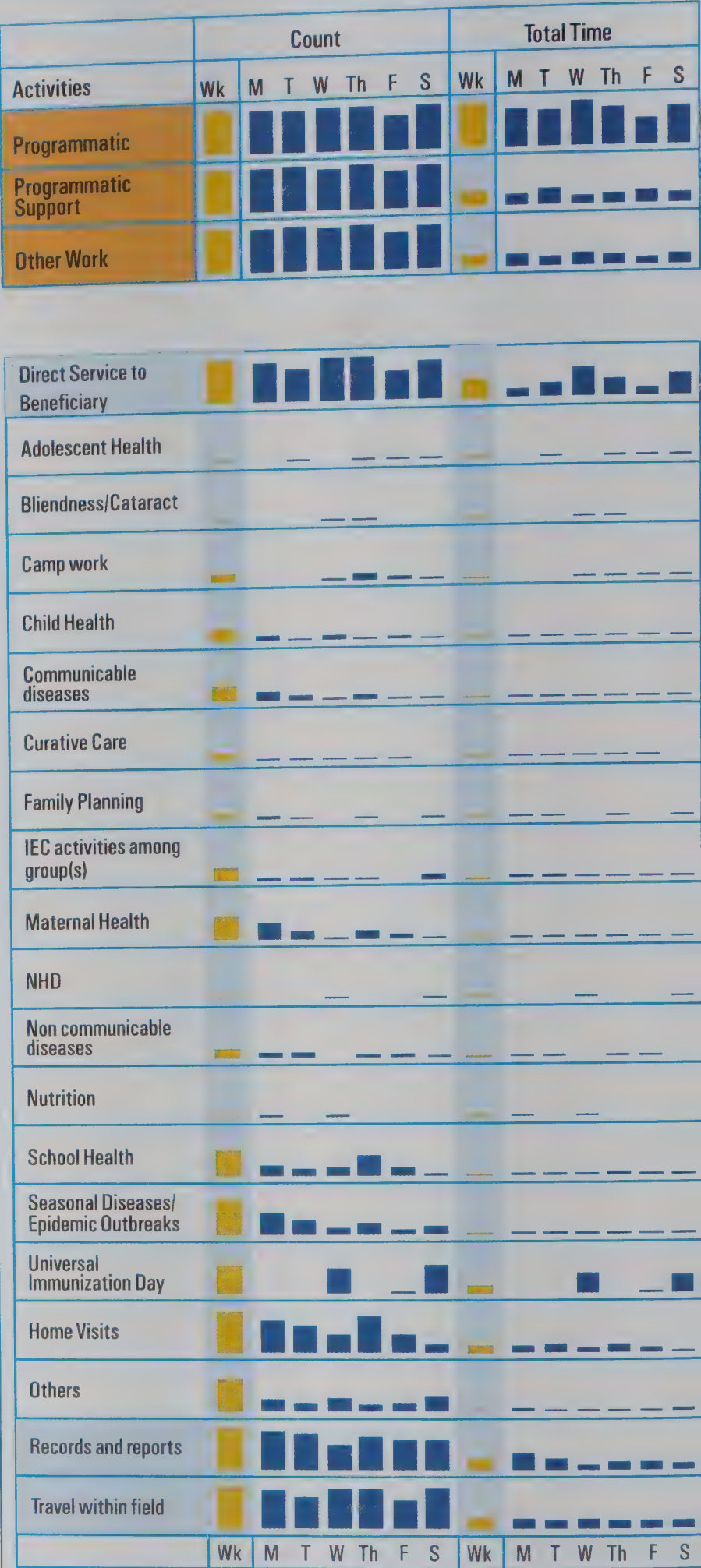
ANMs spent about 60% of their total on job time on programmatic activities in a week, 22% on programme support activities and 18% on other activities.

Within the programmatic category all the ANMs were providing direct service to beneficiaries and also travelled within the field conducting home visits during a week however their distribution varied with respect to day of the week.

Time spent in direct services to beneficiaries was more on Wednesdays and Saturdays and most of this was contributed by UID on Wednesdays and Saturdays. Home visits were more on Mondays and Saturdays.

Maintenance of records and reports was more on Monday and Tuesday as direct service to beneficiaries was less on these days.

Although many ANMs were observed in providing maternal and child health care, school health, seasonal diseases, communicable and non-communicable disease work however this translated to very small proportion of time spent by ANMs.



Details of Programmatic activities

Direct service to beneficiaries: One of the main aims of the TAM study was to demonstrate time utilised by ANMs across different domain areas of direct service delivery to beneficiaries. Time was recorded for sub categories like maternal health, child health, family planning, nutrition, communicable diseases, curative care, seasonal diseases, non-communicable disease etc (Table 5).

Home visits (42 of 43 ANMs) were observed as the most prominent activity undertaken by ANMs followed by seasonal diseases/epidemics/outbreaks control (34 of 43 ANMs). Within home visits activities related with maternal and child health, general health, counselling and awareness building, medicine distribution etc. were performed. As reported by the ANMs, home visits have been one of the core field level strategies to reach out to beneficiaries, do follow ups and cover missed or drop out beneficiaries. Median time spent was 200 minutes with a quarter of ANMs spending less than 105 minutes and other quarter ANMs spending more than 360 minutes.

Within seasonal diseases/ epidemic outbreaks activities comprising of identification/ assessment, referral and counselling related with fever, malaria, cold, dysentery etc. were observed. It was specifically observed as a separate sub category from communicable diseases (comprising of Tuberculosis, HIV, and leprosy) mainly because at the time of data collection study areas (especially Srikakulam) were prone to the spread of infections and prone to epidemics. Median time spent by 43 ANMs was 10 minutes (IQR, 3-38 minutes). Of those 34 who performed this activity, time spent ranged from a minimum two minutes to a maximum of 121 minutes per week.

In terms of time utilised, UID activity consumed a large amount of the ANMs time, however only 30 ANMs were observed imparting these services. Median time spent by ANMs in UID was 257 minutes (IQR, 0-470 minutes). Of the 30 ANMs who were engaged in UID, time spent by an ANM ranged from a minimum zero minutes to maximum 777 minutes per week. UID is one of the most prominent activities where multi-tasking was most common. On the field ANMs devoted a whole day usually Wednesday to UID while simultaneously doing other activities like general health checkups of the village community, medicine distribution, awareness building and sharing of health related information, ANC women check-ups, writing of records including beneficiary records, personal phone calls and often lunch breaks along with waiting for children and their mothers. As the primary activity was UID thus the time was recorded under this category. It is important to note that 13 of 43 ANMs were not involved in UID activities and these were from Srikakulam and Khammam Districts.

Camp work comprised of medical health camps, family planning operation camps etc. Only 11 of 43 ANMs went for camps with the largest number being reported from Srikakulam (5 ANMs) followed by three each from Chittoor and Khammam.

Overall time spent on IEC activities was much lower within which time has been spent on IEC activities related with child health, mobilisation of beneficiaries for any camp(s) and events related to health and other sub-categories; communicable diseases, maternal health, and other health related IEC activities. It should be noted that in direct service to beneficiaries though child health gets less time allotment but as observed by the field team in IEC activities the main emphasis was on child health only.

For the good health of the mother and child it is vital that the focus is on nutrition related aspects. For this convergence with the ICDS Scheme and AWWs becomes significant. NHDs are one of the platforms providing the same wherein ANMs, AWWs and ASHAs come together

to deliver activities like health and nutrition education, maternal and child care, routine immunisation, vitamin A dose supplementation, IFA supplementation etc. However, as observed, ANMs paid very little attention to both NHDs and nutrition related activities. As it can be seen in Table 5, during the data collection only three of 43 ANMs (from the non tribal cluster PHC of Srikakulam) were seen to have had spent time in NHDs in the range of 0 – 71 minutes. Likewise, on the nutrition related service delivery component, only two of 43 ANMs were observed to have had spent time. The sub category of nutrition devised in the observation schema comprised of key activities like IFA tablet distribution, identification/assessment and referral of malnutrition cases, counselling etc. As the observation period was just one week per ANM thus it is likely that activities like NHD might have fallen either in the week before the data collection or the week after (NHD is organised once every fortnight; the 1st NHD is organised at the SC while the 2nd NHD is organised at the AWC).

About one third of the total ANMs (12 of 43) performed key activities under the sub-category of non-communicable diseases (NCDs). As revealed through data, this activity was mainly performed on Monday and Tuesday (4 ANMs each) and Thursday (3 ANMs) with one ANM performing the same on Wednesday. As per the work plan observed across the field setting and pilot study experience, the day designated for NCD services is Monday which is delivered mainly through the '104 service' from the CHCs. However, the activity in the field conducted entirely based upon the feasibility of performing the same. Srikakulam and Chittoor are two of the 100 districts selected for the National Programme for Prevention and Control of Cancer, Diabetes, CVD and Stroke (NPCDCS). However, only three ANMs from Srikakulam and four from Chittoor were found to have had spent any observable time on NCDs; mainly pertaining to blood pressure and diabetes check and referrals to PHCs. In Khammam, only five ANMs were engaged in activities related with NCDs.

Under maternal health activities ANC women registration, ANC women routine check up (blood pressure, height, weight, haemoglobin testing), birth and death registration, PNC women routine check up, counselling etc. were observed. Of 43, only 24 ANMs were observed performing maternal health related activities with eight minutes as median time spent (IQR, 0-22 minutes) per week. The time spent by the 24 ANMs for maternal health ranged from one to 197 minutes per week. However, it was observed and shared by ANMs with the data collection team, ANMs did find it difficult to perform activities like ANC check up mainly because of inadequate training. A few of the ANMs were found to be struggling with basic functions like haemoglobin testing and accurately recording the readings. During the data collection phase it was found that ANMs had not conducted deliveries at any of the SCs.. In tribal PHCs, especially in Srikakulam which is extremely hilly terrain, during one of the field interactions, ANMs clearly asked for EmOC training with better infrastructure facilities (like water, electricity, examination table and functional equipments) in order to be able to address emergency delivery cases in the situation when the PHC was not functioning 24x7 and the 108 ambulance service could not reach the hilly inaccessible locations. Referrals for deliveries including normal deliveries were either made to the PHC or directly to CHCs because of inadequate facilities and lack of training.

Observation of the sub category of child health comprised of key activities like identification, referral and accompanying the sick child, follow up with missed children or drop outs from immunisation, on the spot paediatric care, counselling etc. However, as observed in the field it was largely restricted to either UID (time recorded as separate sub category) or a follow up of missed children or drop outs from immunisation. ANMs did not practice other significant activities for holistic child health frequently.

Overall time spent on direct service to beneficiaries per week per ANM was low across all the three districts and very low for Chittoor. The Chittoor ANMs however had spent some time on nutrition and family planning which other district ANMs had not. The district heads seemed to

have emphasised on these aspects. Further analysis revealed that ANMs from the PPP PHC in Chittoor and tribal PHC of Khammam spent much less time on family planning.

It was observed that ANMs from different PHCs and districts had adopted their own of working for e.g. ANMs from Chittoor provided maternal health check-ups and other curative care during UID when they were stationed at the centre; ANMs from PPP PHC (of Chittoor) and from Khammam tribal PHC had spent more time in home visits (also because of *Mission Indhradhanush* Survey activity was clubbed with home visits) and probably provided some of service delivery aspects during those visits; while ANMs from Srikakulam seem to have a balance of centre based service delivery and home visits. Thus this aspect of time spent is difficult to assess and would require in-depth understanding of ANMs work plans and the role of preferences and instructions communicated through superiors in the district.

To conclude, apart from UID and home visits, time spent in vital components of ANMs programmatic job functions such as curative care, family planning, IEC, camps, counselling, NHD, school health, adolescent health etc. was much less, almost negligible in a few of the cases. In the case of seasonal diseases/epidemic outbreaks control though 34 ANMs performed activities but the duration for which it was performed was recorded as a small number.

Records and reports: In total, ANMs spent median 422 minutes (IQR, 236-537 minutes) per week per ANM on records and reports. Of the 43 ANMs, 41 were observed maintaining various kinds of registers. Median time spent was 232 minutes (IQR, 101-413 minutes) per week to maintain registers. ANMs maintained at least 18 kinds of different registers as shared during interviews and FGDs. During the study it was also observed that as part of the records maintenance a few of the ANMs in Khammam maintained extra books to record data and note information in an organised way. ANMs expressed that this helped them in quick reporting to the management and keep track of field level requirements.

Apart from registers, there were various kinds of reports (weekly, monthly, quarterly etc.) which ANMs had to maintain to be submitted to the PHC or higher authorities (on need base). Thirty three of 43 ANMs were observed to have had maintained reports with 21 minutes as median time spent (IQR, 5-100 minutes) per week. Of ANMs who spent time on maintaining reports (33), minimum three minutes and a maximum of 623 minutes were spent on writing reports. The ANMs, supervisors and MOs said that sporadically a few of these reports were asked to be submitted on an urgent basis with no detailed explanation to fill up the same (reference Photo story on Records maintenance). From interviews, records maintenance did emerge as a crucial challenge for ANMs in effective time management.

Travel within field: All 43 ANMs were observed while undertaking field level travel which involved health facility to village, village to village and return as mentioned in Table 4 and Table 5. During weekdays, median time in field level travel was observed and recorded as a minimum of 39 minutes on Tuesday and just about 60 minutes on the rest of the days. As shared by ANMs during field level interactions, often far off remote locations from PHC/SC were either left out during regular field outreach or covered less frequently (once in a month or may be even less). (**Note:** *This estimate does not include the time spent in direct beneficiary service delivery in the field (home visit), camps or meetings within the community. This just reports the travel time to the field and between houses.*)

Table 5: Sub-categories of programmatic activities performed by ANMs across six days of the week, N = 43 (in minutes)

Count gives number of ANMs performing the respective activity; Time for ANMs not doing activity was considered as 0 while computing Minimum - Maximum, Median (IQR); Average time was estimated per week for only those who performed the activity

Particulars	Total/week				Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
	Count N (%)	Range		Median (IQR) - IQR3	Avg. Total/ week / ANM	N (%)		N (%)	N (%)	median	N (%)	median	N (%)	median	N (%)	median
		Min	Max													
Direct Service to Beneficiary	43 (100.0)	234	1405	586 (439-872)	664	38 (88.4)	58	30 (69.8)	83	43 (100.0)	157	43 (100.0)	106	27 (62.8)	44	38 (88.4)
Adolescent Health	4 (9.3)	0	8	0	4	0.0	0	1 (2.3)	0	0.0	0	1 (2.3)	0	1 (2.3)	0	1 (2.3)
Blindness/ Cataract	2 (4.7)	0	32	0	21	0.0	0	0.0	0	1 (2.3)	0	1 (2.3)	0	0.0	0	0.0
Camp Work	11 (25.6)	0	221	0 (0 -14)	99	0.0	0	0.0	0	1 (2.3)	0	6 (14.0)	0	3 (7.0)	0	2 (4.7)
Child Health	15 (34.9)	0	13	0 (0 -6)	8	4 (9.3)	0	2 (4.7)	0	4 (9.3)	0	2 (4.7)	0	3 (7.0)	0	2 (4.7)
Communicable Diseases	18 (41.9)	0	162	0 (0 -4)	20	9 (20.9)	0	5 (11.6)	0	1 (2.3)	0	4 (9.3)	0	1 (2.3)	0	2 (4.7)
Curative Care	7 (16.3)	0	29	0	17	2 (4.7)	0	2 (4.7)	0	1 (2.3)	0	2 (4.7)	0	1 (2.3)	0	0.0
Family Planning	6 (14.0)	0	43	0	17	3 (7.0)	0	1 (2.3)	0	0.0	0	2 (4.7)	0	0.0	0	1 (2.3)
IEC Activities among Group(s)	13 (30.2)	0	35	0 (0 -8)	15	7.0	0	3 (7.0)	0	2 (4.7)	0	2 (4.7)	0	0.0	0	4 (9.3)
Maternal Health	24 (55.8)	0	197	8 (0 -22)	43	16 (37.2)	0	7 (16.3)	0	2 (4.7)	0	7 (16.3)	0	5 (11.6)	0	2 (4.7)
NHD	3 (7.0)	0	71	0	35	0.0	0	0.0	0	2 (4.7)	0	2 (4.7)	0	0.0	0	2 (4.7)
Non communicable Diseases	12 (27.9)	0	73	0 (0 -3)	17	4 (9.3)	0	4 (9.3)	0	0.0	0	3 (7.0)	0	3 (7.0)	0	0.0
Nutrition	2 (4.7)	0	4	0	4	1 (2.3)	0	0.0	0	1 (2.3)	0	0.0	0	0.0	0	0.0

School Health	27 (62.8)	0	259	25 (0 -56)	70	10 (23.3)	0	6 (14.0)	0	8 (18.6)	0	20 (46.5)	0	7 (16.3)	0	1 (2.3)	0
Seasonal Diseases/ Epidemic Outbreaks	34 (79.1)	0	121	10 (3-38	34	22 (51.2)	2	15 (34.9)	0	6 (14.0)	0	12 (27.9)	0	5 (11.6)	0	7 (16.3)	0
Universal Immunisation Day	30 (69.8)	0	777	257 (0 -470)	387	0.0	0	0.0	0	25 (58.1)	97	0.0	0	2 (4.7)	0	27 (62.8)	123
Home Visits	42 (97.7)	0	727	200 (105 -360)	250	30 (69.8)	29	26 (60.5)	45	19 (44.2)	0	37 (86.0)	57	18 (41.9)	11	9 (20.9)	0
Others	31 (72.1)	0	534	51 (0 -89)	95	12 (27.9)	0	8 (18.6)	0	14 (32.6)	0	6 (14.0)	0	9 (20.9)	0	15 (34.9)	0
Records and Reports	43 (100.0)	12	886	422 (236 -537)	386	38 (88.4)	104	35 (81.4)	50	25 (58.1)	5	33 (76.7)	41	24 (55.8)	30	29 (67.4)	8
Beneficiary Records	12 (27.9)	0	39	0 (0 -4)	16	5 (11.6)	0	1 (2.3)	0	1 (2.3)	0	2 (4.7)	0	2 (4.7)	0	2 (4.7)	0
Computer Data Entry	15 (34.9)	0	268	0 (0 -43)	104	10 (23.3)	0	6 (14.0)	0	1 (2.3)	0	3 (7.0)	0	3 (7.0)	0	3 (7.0)	0
Health Pro Formats	1 (2.3)	0	6	0	6	0.0	0	0.0	0	1 (2.3)	0	0.0	0	0.0	0	0.0	0
Registers	41 (95.3)	0	581	232 (101 -413)	264	34 (79.1)	65	24 (55.8)	4	20 (46.5)	0	29 (67.4)	32	21 (48.8)	20	19 (44.2)	0
Reports	33 (76.7)	0	623	21 (5 -100)	102	5 (11.6)	0	14 (32.6)	0	9 (20.9)	0	9 (20.9)	0	7 (16.3)	0	16 (37.2)	0
Others	21 (48.8)	0	135	0 (0 -18)	31	6 (14.0)	0	10 (23.3)	0	4 (9.3)	0	4 (9.3)	0	4 (9.3)	0	0.0	0
Travel to and within Field	43 (100.0)	101	893	352 (289-450)	391	37 (86.0)	60	30 (69.8)	39	40 (93.0)	64	40 (93.0)	64	28 (65.1)	64	42 (97.7)	57

3. TIME SPENT BY 1st AND 2nd ANMs ACROSS VARIOUS CATEGORIES AND SUB CATEGORIES OF ACTIVITIES

Across the study districts, the 1st and 2nd ANMs were observed in order to see any overlaps and variations in their work time utilisations. The 1st ANMs were regular ANMs while 2nd ANMs were employed on contract under NRHM. The position of 2nd ANMs was introduced so that they could provide support to the 1st ANMs work (Table 6 and 7).

Programmatic activities: Median time recorded for 1st ANMs was 1313 minutes (IQR, 1243-1451 minutes) and for 2nd ANMs the time was 1411 minutes (IQR, 1257-1650 minutes). The 1st ANM spent average 1400 minutes per week (minimum 999 minutes and maximum 2111 minutes) on programmatic activities while the 2nd ANM spent 1481 minutes per week (minimum 742 minutes and maximum 2368 minutes) on the programmatic component.

Average time spent in a week by the 1st ANM and 2nd ANM across various categories of programmatic component was almost equivalent, however there was variation in medians for within field travel time per week; 73 minutes more for 2nd ANM (402 minutes) than 1st ANM (329 minutes).

Details of programmatic activities

Direct services to beneficiary: As it can be seen in Table 7 most activities related with service delivery were performed both by the 1st and 2nd ANMs. The only major variation was for communicable and non-communicable diseases where a larger number of 2nd ANMs were involved (11 and 8 respectively). As shared during interviews, co worker's support in terms of other ANMs presence provided a lot of support in field level functioning and time management. ANMs had clearly demarcated their geographic areas in order to accomplish job function activities which is evident in Table 5 in terms of time as well as equal proportion of 1st and 2nd ANMs engaged in various sub categories of service delivery related activities. Among the 1st ANMs and 2nd ANMs, the top two sub categories consuming ANMs median time were UIDs (1st ANM 257 minutes; IQR 0-432 minutes and 2nd ANM 264 minutes; IQR 11-473 minutes) and home visits (1st ANM 200 minutes; IQR 115-362 minutes and 2nd ANM 183 minutes; IQR 100-333 minutes). This was followed by a sharp decline with median time recorded as zero minutes for most of the sub categories.

Travel within field: Median time spent by 1st ANMs in field level travel was 329 minutes with one fourth spending less than 261 minutes and the other one fourth spending more than 436 minutes. Twenty one of the 1st ANMs, on average spent 433 minutes per ANM in a week. Median time spent by 2nd ANMs (402 minutes; IQR 343-511 minutes) in field travel was 30 minutes more than 1st ANMs. Twenty two of the 2nd ANMs spent an average time of 438 minutes per ANM in a week. During field level interactions, ANMs said that while the 1st ANM largely took charge of most of the service delivery and other components at the facility level, the 2nd ANM was rigorously involved in field level outreach and follow ups. However this did not reflect in the duration of time spent in home visits. It appears that 2nd ANMs were covering more far off villages as compared to 1st ANMs as reflected from within field travel times. It is also possible that in routine 1st ANMs do not visit the field as often, but they did during the observation period (Hawthorne effect).

Table 6: Time spent by ANMs under broad categories of activities across six days of a week: 1st ANM and 2nd ANM (in minutes)

Count gives number of ANMs performing the respective activity; Time for ANMs not doing activity was considered as 0 while computing Minimum - Maximum, Median (IQR); Average time was estimated per week for only those who performed the activity

Particulars	1st ANM (N=21)					2nd ANM (N=22)				
	Total/week					Total/week				
	Count N (%)	Min	Max	Median (IQR1-IQR3)	Avg.Total / week / ANM	Count N (%)	Min	Max	Median (IQR1-IQR 3)	Avg.Total / week / ANM
Programmatic (sub-total)	21 (100.0)	999	2111	1313 (1243-1451)	1400	22 (100.0)	742	2368	1411 (1257-1650)	1481
Direct services to beneficiary	21 (100.0)	278	1405	629 (405-867)	660	22 (100.0)	234	1199	580 (467-884)	668
Records and reports	21 (100.0)	18	787	422 (261-556)	397	22 (100.0)	12	886	398 (220-526)	376
Travel to and within field	21 (100.0)	101	715	329 (261-436)	433	22 (100.0)	251	893	402 (343-511)	438
Programmatic supportive (sub-total)	21 (100.0)	103	977	518 (370-639)	513	22 (100.0)	97	981	558 (339-733)	532
Trainings	4 (19.0)	0	329	0	304	3 (13.6)	0	331	0	312
Meetings / Discussions with co workers or village community	21 (100.0)	65	428	187 (117-284)	209	22 (100.0)	53	402	233 (169-325)	241
Meetings / Discussions with seniors	21 (100.0)	20	287	164 (93-200)	154	22 (100.0)	4	547	131 (89-229)	160
Non-health but work related activities	8 (38.1)	0	121	0	38	9 (40.9)	0	107	0 (0-20)	40
Administrative	21 (100.0)	17	262	68 (43-91)	77	22 (100.0)	18	270	61 (34-86)	72
Other work (sub-total)	21 (100.0)	220	787	413 (321-469)	400	22 (100.0)	226	630	440 (350-548)	440
Waiting	15 (71.4)	0	141	54 (0-94)	74	21 (95.5)	0	210	64 (32-167)	96
Miscellaneous: personal work	21 (100.0)	213	430	297 (255-378)	313	22 (100.0)	79	520	310 (249-342)	304
Others/Null entries/Uncategorised	11 (52.4)	0	333	2 (0-32)	64	11 (50.0)	0	225	1 (0-61)	88
Grand Total on Job	21 (100.0)	2207	3291	2726 (2561-2924)	2745	22 (100.0)	1819	4299	2852 (2627-3018)	2848

Table 7: Time spent by ANMs in sub categories of activities across six days of a week: 1st ANM and 2nd ANM (in minutes)

Count gives number of ANMs performing the respective activity; Time for ANMs not doing activity was considered as 0 while computing Minimum - Maximum, Median (IQR); Average time was estimated per week for only those who performed the activity

Particulars	1st ANM (N=21)					2nd ANM (N=22)				
	Total/week					Total/week				
	Count N (%)	Min	Max	Median (IQR1-IQR3)	Avg. Total / week / ANM	Count N (%)	Min	Max	Median IQR1-IQR3)	Avg. Total
Direct Services to Beneficiary	21 (100.0)	278	1405	629 (405-867)	660	22 (100.0)	234	1199	580 (467-884)	660
Adolescent Health	2 (9.5)	0	8	0	6	2 (9.1)	0	2	0	2
Blindness/Cataract	1 (4.8)	0	32	0	32	1 (4.5)	0	10	0	10
Camp Work	5 (23.8)	0	221	0	93	6 (27.3)	0	170	0 (0-23)	104
Child Health	7 (33.3)	0	13	0	9	8 (36.4)	0	13	0 (0-6)	8
Communicable Diseases	7 (33.3)	0	15	0	7	11 (50.0)	0	162	1 (0-5)	28
Curative Care	3 (14.3)	0	29	0	16	4 (18.2)	0	22	0	18
Family Planning	3 (14.3)	0	43	0	23	3 (13.6)	0	28	0	11
IEC Activities Among Group(s)	6 (28.6)	0	24	0	13	7 (31.8)	0	35	0 (0-8)	18
Maternal Health	11 (52.4)	0	176	2 (0-19)	49	13 (59.1)	0	197	9 (0-23)	37
NHD	1 (4.8)	0	71	0	71	2 (9.1)	0	20	0	16
Non Communicable Diseases	4 (19.0)	0	6	0	5	8 (36.4)	0	73	0 (0-4)	23
Nutrition	0	0	0	0	0	2 (9.1)	0	4	0	4
School Health	14 (66.7)	0	165	25 (0-50)	57	13 (59.1)	0	259	20 (0-78)	83
Seasonal Diseases/Epidemic Outbreaks	16 (76.2)	0	121	9 (3-22)	28	18 (81.8)	0	119	11 (4-45)	40
Universal Immunisation Day	14 (66.7)	0	710	257 (0-432)	406	16 (72.7)	0	777	264 (11-473)	370
Home Visits	21 (100.0)	41	727	200 (115-362)	261	21 (95.5)	0	511	183 (100-333)	230
Others	15 (71.4)	0	230	40 (0-70)	77	16 (72.7)	0	534	61 (1-110)	113
Records and Reports	21 (100.0)	18	787	422 (261-556)	397	22 (100.0)	12	886	398 (220-526)	370
Beneficiary Records	6 (28.6)	0	39	0 (0-9)	21	6 (27.3)	0	21	0 (0-2)	11
Computer Data Entry	9 (42.9)	0	266	0 (0-60)	90	6 (27.3)	0	268	0 (0-6)	125
Health	1 (4.8)	0	6	0	6	0	0	0	0	0
Registers	20 (95.2)	0	581	265 (98-423)	276	21 (95.5)	0	528	229 (158-386)	253
Reports	18 (85.7)	0	287	27 (11-163)	95	15 (68.2)	0	623	17 (0-63)	111
Others	7 (33.3)	0	61	0	25	14 (63.6)	0	135	8 (0-29)	34
Travel to and within Field	21 (100.0)	101	715	329 (261-436)	433	22 (100.0)	251	893	402 (343-511)	438

4. TIME SPENT BY ANMs FROM PHCs IN TRIBAL AND NON TRIBAL CLUSTERS ACROSS VARIOUS CATEGORIES AND SUB CATEGORIES OF ACTIVITIES

There were a total of two tribal cluster PHCs; one each from Srikakulam (PHC Kusimi/Seetampeta cluster) and Khammam (PHC Singareni/Yellandu cluster) and four non-tribal clusters (Chittoor had both the PHCs from non tribal clusters). Thirteen ANMs from the tribal cluster and 30 ANMs from non tribal clusters participated in the study. As already mentioned above and in Table 1, ANMs in tribal clusters effectively devote only median 5:01 hours per day for programmatic and programme supportive functions including time incurred in waiting and personal work. However, in non tribal clusters ANMs devoted median 6:06 hours of time on work which was 1:05 hours more than the tribal cluster ANMs (Table 8 and 9).

Programmatic activities: While in tribal clusters, ANMs spent median 1108 minutes (IQR, 1019-1315 minutes), in non-tribal clusters they spend 1416 minutes (IQR, 1303-1815 minutes).

Details of programmatic activities

Direct service to beneficiary: While in tribal cluster PHCs the average total time recorded per week per ANM was 490 minutes (range 234-1139 minutes); in non tribal cluster PHCs it was 739 minutes (range 365-1405 minutes).

In tribal cluster PHCs, 12 of 13 ANMs were observed to be engaged in home visits and seasonal diseases/epidemics/outbreaks control. The district had declared an epidemic/outbreak in tribal clusters at the time of data collection because of which the ANMs' focus was more on disease identification, treatment and referral as required. Malaria was widespread in the tribal cluster of Srikakulam. Median 22 minutes were spent on epidemic/outbreaks control, with one fourth of the ANMs spending less than five minutes and other one fourth spending more than 74 minutes.

In the non-tribal cluster, all 30 ANMs were observed to be engaged in home visits followed by UIDs (23 ANMs) and seasonal diseases/epidemics/outbreaks control (22 ANMs). In contrast with the tribal cluster, a much larger proportion of ANMs across non tribal clusters were also engaged in other service delivery functions like school health, maternal health, child health, communicable diseases, IEC activities etc however the time spent for each of these was much smaller. It appears from Tables 8 and 9 that tribal cluster ANMs need to strongly engage with other crucial service delivery activities apart from home visits and seasonal diseases/outbreaks control while on the other hand non tribal ANMs need to utilise their time better, depending upon epidemiological needs of the given population

As shared by ANMs, home visits were of great significance in delivering health services to the community which often missed the services or dropped out either because of distance or work in agricultural fields. Median 129 minutes per week (IQR, 81-210) were spent on home visits in tribal clusters compared with median 302 minutes per week (IQR, 130-407) in non-tribal clusters.

**Table 8: Time spent by ANMs under broad categories of activities across the days of the week:
Tribal and Non tribal cluster wise (in minutes)**

Count gives number of ANMs performing the respective activity; Time for ANMs not doing activity was considered as 0 while computing Minimum - Maximum, Median (IQR); Average time was estimated per week for only those who performed the activity

Particulars	Total/week (Tribal Cluster N= 13)					Total/week (Non-tribal Cluster N= 30)				
	Count N (%)	Min	Max	Median (IQR1-IQR3)	Avg. Total / week / ANM	Count N (%)	Min	Max	Median (IQR1-IQR3)	Avg. Total / week / ANM
Programmatic (sub-total)	13 (100.0)	742	2368	1108 (1019-1315)	1199	30 (100.0)	1161	2143	1416 (1303-1815)	1546
Direct service to beneficiary	13 (100.0)	234	1139	405 (340-586)	490	30 (100.0)	365	1405	689 (541-945)	739
Records and reports	13 (100.0)	12	886	329 (141-504)	344	30 (100.0)	32	787	424 (265-538)	404
Travel to and within field	13 (100.0)	101	893	343 (276-352)	365	30 (100.0)	212	715	393 (302-453)	403
Programme supportive (sub-total)	13 (100.0)	97	981	476 (329-603)	486	30 (100.0)	103	977	541 (350-712)	539
Trainings	0	0	0	0	0	7 (23.3)	0	331	0	307
Meetings / Discussions with co workers or village community	13 (100.0)	53	343	257 (187-319)	239	30 (100.0)	65	428	205 (140-298)	220
Meetings / Discussions with seniors	13 (100.0)	6	547	146 (115-187)	163	30 (100.0)	4	299	151 (88-212)	155
Non-health but work related activities	6 (46.2)	0	88	0 (0-55)	55	11 (36.7)	0	121	0 (0-6)	30
Admin	13 (100.0)	18	91	66 (38-77)	58	30 (100.0)	17	270	64 (40 -105)	82
Other work (sub-total)	13 (100.0)	244	599	436 (345-479)	414	30 (100.0)	220	787	418 (332-489)	423
Waiting	11 (78.6)	0	208	69 (9-99)	85	25 (83.3)	0	210	56 (14 -114)	88
Miscellaneous : personal work	13 (100.0)	79	520	276 (241-297)	282	30 (100.0)	182	430	331 (266-375)	320
Others/ Uncategorised	11 (84.6)	0	225	20 (3-96)	71	11 (36.7)	0	333	0 (0-39)	81
Grand total on job	13 (100.0)	1819	4299	2561 (2392-2613)	2617	30 (100.0)	2207	3326	2910 (2711-3018)	2876

For UID, median 44 minutes per week (IQR, 0-257) in tribal and 322 minutes per week (IQR, 108-542) in non-tribal PHCs. UID activity also involved multi-tasking and other service delivery.

Medical camps are a few of the field level outreach strategies which help in reaching out to a larger population at a time. In the TAM study, during the data collection phase, a total of four camps in tribal PHCs (3 in Srikakulam and 1 in Khammam) and seven medical camps in non tribal PHCs (3 in Chittoor, 2 each in Srikakulam and Khammam) were organised. None of these camps were related to family planning. In tribal PHCs, only five ANMs participated in medical camps with an average 50 minutes per week per ANM. In non tribal cluster PHCs, of the six ANMs who participated, an average 140 minutes were spent per week per ANM.

Records and reports: Across both the clusters a maximum number of ANMs were observed to be engaged in completing registers and writing reports. However, median and average time spent per week per ANM on registers and reports maintenance work was more in non-tribal cluster PHCs than tribal PHCs (Table 8).

As reflected in Table 9, only a few minutes were spent, both in tribal and non tribal cluster PHCs, in maintaining beneficiary records which is very essential from the service delivery point of view, regular follow ups and accurate database maintenance.

As observed by the field data collection team in Khammam, at the time of data collection, tablets were not being used and MCTS data was maintained in registers. In the non-tribal PHC of Khammam where a male health supervisor was available, he mainly did the computer entry of MCTS related data collected by ANMs and thus the time recorded for ANMs in this activity was zero minutes. In other PHCs computer data entry work was done by ANMs, either by the 1st ANM or 2nd ANM or both depending upon the feasibility (Photo stories on records maintenance and co worker's support).

Travel within field: Median time spent by ANMs from tribal cluster PHCs was 343 minutes with one fourth of ANMs spending less than 276 minutes and other one fourth spending more than 352 minutes. Of all 13 ANMs, average 365 minutes were spent per week per ANM (range 101-893). Median and average times incurred in tribal cluster PHCs, was recorded to be lower than within field travel in non tribal PHCs, median 393 minutes per week (IQR, 302-453) and average 403 minutes per week per ANM (range 212-715). Within field time recorded was much higher for one of the PHCs in Khammam because of the ongoing *Mission Indradhanush* Survey.

It was also mentioned that ANMs from Srikakulam spent more time in reaching the outreach villages as they had to wait a few minutes before the public transport arrived and also because of remote inaccessible locations where tribal habitations were located. However, ANMs from Khammam spent more time in within field travel walking between habitations. Khammam has sparse distribution of smaller habitations called *tandas* and the ANM had to walk between these to be able to cover the beneficiaries.

In non tribal clusters locations were remote but accessible. As revealed during interviews, transportation was a major impediment in the effective management of ANMs time; dimensions of which were varied for tribal and non tribal clusters. Transportation also posed a challenge in other aspects related with work like carrying of heavy vaccine kits on Immunisation Days etc. During interviews with officials, a clear demand for a vehicle or ambulance at the PHC level was expressed. In the tribal cluster of Srikakulam, which is under ITDA, an ambulance is provided which is at the CHC level and the facility can be availed by ANMs for reaching the community only in cases of emergency, as per the discretion of the SPHO.

Table 9: Time spent by ANMs in sub categories of activities across the days of the week: Tribal and non tribal cluster wise (in minutes)

Count gives number of ANMs performing the respective activity; Time for ANMs not doing activity was considered as 0 while computing Minimum - Maximum, Median (IQR); Average time was estimated per week for only those who performed the activity

Particulars	Total/week (Tribal Cluster N= 13)					Total/week (Non-tribal Cluster N= 30)				
	Count N (%)	Min	Max	Median (IQR1-IQR3)	Avg. Total / week / ANM	Count N (%)	Min	Max	Median (IQR1-IQR3)	Avg. Total / week / ANM
Direct Service Delivery to Beneficiary	13 (100.0)	234	1139	405 (340-586)	490	30 (100.0)	365	1405	689 (541-945)	739
Adolescent Health	0	0	0	0	0	4 (13.3)	0	8	0	4
Blindness/Cataract	2 (15.4)	0	32	0	21	0	0	0	0	0
Camp Work	5 (38.5)	0	100	0 (0-31)	50	6 (20.0)	0	221	0	140
Child Health	2 (15.4)	0	12	0	10	13 (43.3)	0	13	0 (0-7)	8
Communicable Diseases	5 (38.5)	0	162	0 (0-2)	39	13 (43.3)	0	101	0 (0-4)	13
Curative Care	2 (15.4)	0	29	0	24	5 (16.7)	0	22	0	14
Family Planning	1 (7.7)	0	24	0	24	5 (16.7)	0	43	0	16
IEC Activities among Group(s)	3 (23.1)	0	9	0	8	10 (33.3)	0	35	0 (0-9)	17
Maternal Health	10 (76.9)	0	148	17 (10-33)	37	14 (46.7)	0	197	0 (0-18)	47
NHD	0	0	0	0	0	3 (10.0)	0	71	0	35
Non communicable Diseases	4 (30.8)	0	73	0 (0-3)	27	8 (26.7)	0	29	0 (0-2)	11
Nutrition	0	0	0	0	0	2 (6.7)	0	4	0	4
School Health	8 (61.5)	0	165	41 (0-102)	89	19 (63.3)	0	259	22 (0-49)	62
Seasonal Diseases/ Epidemic Outbreaks	12 (92.3)	0	119	22 (5-74)	42	22 (73.3)	0	121	10 (1-31)	30
Universal Immunisation Day	7 (53.8)	0	777	44 (0-257)	285	23 (76.7)	0	710	322 (108-542)	418
Home Visits	12 (92.3)	0	366	129 (81-210)	173	30 (100.0)	42	727	302 (130-407)	281
Others	11 (84.6)	0	225	20 (3-96)	71	11 (36.7)	0	333	0 (0-39)	81
Records and Reports	13 (100.0)	12	886	329 (141-504)	344	30 (100.0)	32	787	424 (265-538)	404
Beneficiary Records	4 (30.8)	0	16	0 (0-9)	12	8 (26.7)	0	39	0 (0-2)	18
Computer Data Entry	3 (23.1)	0	77	0	63	12 (40.0)	0	268	0 (0-54)	115
Health Pro Formats	1 (7.7)	0	6	0	6	0	0	0	0	0
Registers	12 (92.3)	0	449	108 (42-257)	185	29 (96.7)	0	581	261 (170-432)	297
Reports	11 (84.6)	0	623	62 (14-222)	167	22 (73.3)	0	295	16 (1-59)	69
Others	7 (53.8)	0	61	7 (0-15)	26	14 (46.7)	0	135	0 (0-19)	33
Travel time spent within Field	13 (100.0)	101	893	343 (276-352)	365	30 (100.0)	212	715	393 (302-453)	403

5. ANMs ADVANCE TOUR PLANS AND WORK PLANNING

An important aspect of work planning was explored through the interviews with ANMs. As shared during interviews, in all the three districts, visits to the villages and field areas were decided depending upon the performance of centres, complaints filed or on a need basis. ANMs also made random visits to the centres without any pre-determined factor. Findings revealed that in **Srikakulam** 12 of 13 ANMs and in **Chittoor and Khammam**, all 30 participant ANMs reported that they had a monthly action plan which they were able to follow and got feedback from their supervisors. In Srikakulam, ten of 13 ANMs expressed their ability to follow the action plan.

Thus, across ANMs, work planning through ATPs/monthly plans/action plans emerged as a common aspect which enabled them to plan and manage their time better. Interviews with officials also laid emphasis on the need for preparing work plans by ANMs in coordination with health supervisors along with periodic follow ups.

In order to understand these work plans better the existing records or documents that were stated to be work plans were studied. Sample work plans of participant ANMs across tribal and non-tribal cluster PHCs were gathered and minutely studied. These work plans were largely pertaining to the period of data collection in each of the districts. Firstly none of the work plans were actually classified as work plans and there was great diversity in the formats. The tour plan was usually mistaken as the work plan and this just aided in planning their visits to the designated villages at least once in a month. However they were all aware of their fixed activities at the centre like UID and ANC on Wednesdays, follow up UID camps on Saturdays, meetings on first Tuesday at PHCs etc. Secondly there was no plan based on coverage or service delivery and did not have a buffer for any unforeseen health or non-health activities. All such activities were incorporated on an ad hoc basis and disrupted the routine work. Below are some insights from the work plans studied.

The work plan of ANMs from the non tribal PHC of Srikakulam (Figure 6) resembled the retrospective tour diary account of work instead of a clear pre-fixed location, time and/or activity linked advance plan. The tour diary (reference period June 2015) majorly reflected time divided between UID, ANC check-ups, one review meeting and field visits. The work plan of an ANM from the tribal PHC of Srikakulam (Figure 7) showed a day wise field visit plan (village's name) for a month. Universal Immunisation Day and ANC check up were the only two activities mentioned in the plan.

The work plan of the ANMs from non tribal PHCs of Chittoor (Figure 8, 9 and Table 10) mentioned the coverage in tour plans wherein detailed village wise household and population coverage was mentioned for the year but no activity details were mentioned. It followed the plan devised for NVBDCP (Malaria control) programme which mandated that each village is visited at least twice in a month and did not take into account the days spent at the SC for fixed activities. Further, ANMs shared that households were covered based on a yearly plan on a rotation basis.

The work plan of ANMs from the tribal PHC of Khammam (Table 11) mentioned the number of houses and number of people to be covered in each of the villages and habitations. Specific days of the week were assigned for field visits to the corresponding village and habitation under the SC. In the plan for UID, a fixed day of the month was assigned for each of the villages/habitations.

Thus, it clearly emerged that neither was there any uniform format to prepare ATPs nor was there any activity wise listing for service delivery. The plans that mentioned location wise number of households and populations to be covered were based on a specific health programme which was unsuccessfully being implemented to cover the field area. A yearly

plan devised for Malaria control was used as a reference by ANMs in order to plan their field and facility level time. As shared, any other sporadic activities like meetings, trainings, surveys etc., were accommodated in the ANMs routine day but compromising the day's and/or week's overall tasks. Follow up was seldom done by supervisors.

Another aspect which was explored through interviews was with reference to receiving and knowing their job description which in turn determined activity wise work planning. Twenty six of 43 ANMs reported to have had received their job description at the time of joining while 12 received it later after joining. Two ANMs each shared about receiving the job description only upon asking for it and receiving an updated job description in last three months. Further analysis revealed that in **Srikakulam** only seven of 13 ANMs, in Chittoor nine of 15 and in Khammam 10 of 15 had received their job description at the time of joining while the remaining received it later. Only two ANMs from Khammam reported receiving an updated job description in the past three months.

After a number of on field discussions it was realised that the ANMs could not describe their job description properly. They felt the new programmes and initiatives being launched were a great strain and none had any idea about how to incorporate the guidelines into their overall day to day grassroots level planning. One of the ANMs stated that they do as much they can and another stated that they had no choice but to deliver whatever is expected by the seniors. It was apparent that there was no holistic plan rather the ANMs work was defined by some fixed expectations (e.g. UID and ANC) and many sporadic activities based on the preferences and needs of the several programmes and decided by the district or state administration (e.g. reports, trainings, seasonal diseases, family planning, meetings, surveys etc.)

Figure 6: ANMs work plan from non tribal PHC of Srikakulam

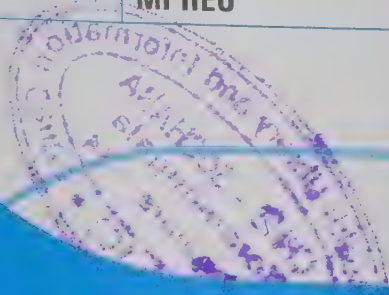
Date	From	To	Remarks
1/6/15	P.K. Palam	P.K. Palam	attended to health
2/6/15	P.K. Palam	P.K. Palam	attended to health
3/6/15	P.K. Palam	P.K. Palam	attended to health
4/6/15	P.K. Palam	P.K. Palam	attended to health
5/6/15	P.K. Palam	P.K. Palam	attended to health
6/6/15	P.K. Palam	P.K. Palam	attended to health
7/6/15	P.K. Palam	P.K. Palam	attended to health
8/6/15	P.K. Palam	P.K. Palam	attended to health
9/6/15	P.K. Palam	P.K. Palam	attended to health
10/6/15	P.K. Palam	P.K. Palam	attended to health
11/6/15	P.K. Palam	P.K. Palam	attended to health
12/6/15	P.K. Palam	P.K. Palam	attended to health
13/6/15	P.K. Palam	P.K. Palam	attended to health
14/6/15	P.K. Palam	P.K. Palam	attended to health
15/6/15	P.K. Palam	P.K. Palam	attended to health
16/6/15	P.K. Palam	P.K. Palam	attended to health
17/6/15	P.K. Palam	P.K. Palam	attended to health
18/6/15	P.K. Palam	P.K. Palam	attended to health
19/6/15	P.K. Palam	P.K. Palam	attended to health
20/6/15	P.K. Palam	P.K. Palam	attended to health
21/6/15	P.K. Palam	P.K. Palam	attended to health
22/6/15	P.K. Palam	P.K. Palam	attended to health
23/6/15	P.K. Palam	P.K. Palam	attended to health
24/6/15	P.K. Palam	P.K. Palam	attended to health
25/6/15	P.K. Palam	P.K. Palam	attended to health
26/6/15	P.K. Palam	P.K. Palam	attended to health
27/6/15	P.K. Palam	P.K. Palam	attended to health
28/6/15	P.K. Palam	P.K. Palam	attended to health
29/6/15	P.K. Palam	P.K. Palam	attended to health
30/6/15	P.K. Palam	P.K. Palam	attended to health

Figure 7: ANMs work plan from tribal PHC of Srikakulam

P.H.C = Kuzimidi ANM = K. Annala ANM (T)				
Subcenter = Erandi Telugu Program				
Weeks	I week	II week	III week	IV week
Mon	Naab. 1st 1st	Naab. 1st 1st	Naab. 1st 1st	Naab. 1st 1st
Tue	Naab. 2nd 2nd	Naab. 2nd 2nd	Naab. 2nd 2nd	Naab. 2nd 2nd
Wed	Naab. 3rd 3rd	Naab. 3rd 3rd	Naab. 3rd 3rd	Naab. 3rd 3rd
Thu	Naab. 4th 4th	Naab. 4th 4th	Naab. 4th 4th	Naab. 4th 4th
Fri	Naab. 5th 5th	Naab. 5th 5th	Naab. 5th 5th	Naab. 5th 5th
Sat	Naab. 6th 6th	Naab. 6th 6th	Naab. 6th 6th	Naab. 6th 6th
Sun	Naab. 7th 7th	Naab. 7th 7th	Naab. 7th 7th	Naab. 7th 7th

Table 10: ANMs work plan from 1st non tribal PHC of Chittoor

RAJANNA PRIMARY HEALTH CENTER, THALAPUNENIVARIPALLI							
FIXED TOUR PROGRAMME FOR THE YEAR 2015							
SUB CENTER - XY							
NAME OF THE MPHA(F): XY				NVBDCP CODE NO:B10			
Sl. No	Unit No	Name Of the villages	Land Mark	No Of Houses	Male	Female	Population
1	11	Kondreddy Kandiga		19	16	18	34
2	12	E.C. Palli S.T. Colony		13	16	22	38
3	13	E.C. Palli Village	School Area	45	78	75	153
4	14	E.C. Palli Village	Temple Area	35	53	50	103
5	15	E.C. Palli M.W		29	50	54	104
6	16	E.C. Palli H.W	AWC	38	69	65	134
7	17	E.C. Palli H.W	Temple Area	38	62	62	124
8	18	E.C. Palli H.W	School Area	35	67	65	132
9	19	E.C. Palli H.W	Water Tank	30	59	58	117
10	20	E.C. Palli H.W & Obaigaripalli	Bus Stop	14	20	19	39
11	10	E. Chowdepalli		15	37	39	76
12	9	D. Chowdepalli		50	120	120	240
13	8	Morava Patoor		30	59	60	119
14	7	Morava Patoor & Vaddipalli	Water Tank	20	44	44	88
15	6	Chigarapallimitta		13	18	17	35
16	5	Patoor H.W	Temple Area	25	50	45	95
17	4	Patoor H.W	Bus Stop	20	43	39	82
18	3	Patoor Village & H.W	Temple Area	25	52	49	101
19	2	Patoor Village	Juice Factory	25	53	43	96
20	1	Patoor Village	Sub Centre Area	25	49	50	99
		TOTAL		544	1015	994	2009
				Signature of the MPHS(F)		Signature of the MPHA(F)	
		Signature of the MPHEO	Signature of the MO				



FIXED TOUR PROGRAMME FOR THE YEAR - 2014					
SUB - CENTER AMBARKKAM PHC - DASUKUPPAM					
CODE NO - U34					
Sl. No.	UNITS	NAME OF THE VILLAGES	TOTAL HOUSES	TOTAL POPULATION	TOTAL POPULATION
1	11	Ambarkkam - V	32	153	
2	12	Ambarkkam - V	33	154	
3	13	Ambarkkam - Hw	24	135	
4	14	Ambarkkam - Hw	33	161	
5	15	Ambarkkam - Hw	33	177	
6	16	Secbarampet - V	25	141	
7	17	Secbarampet - Hw	25	135	
8	18	Secbarampet - Hw	24	132	
9	19	Secbarampet - S.T colony	12	51	133
10	20	Pudukuppam - Hw	24	132	
11	21	Pudukuppam - Hw	25	131	
12	22	Pudukuppam - Hw	25	131	
13	23	Pudukuppam - Hw	24	131	
14	24	Pudukuppam - Hw	24	131	
15	25	Pudukuppam - Hw	24	131	
16	26	Pudukuppam - Hw	24	131	
17	27	Pudukuppam - Hw	24	131	
18	28	Pudukuppam - Hw	24	131	
19	29	Pudukuppam - Hw	24	131	
20	30	Pudukuppam - Hw	24	131	
21	31	Pudukuppam - Hw	24	131	
22	32	Pudukuppam - Hw	24	131	
23	33	Pudukuppam - Hw	24	131	
24	34	Pudukuppam - Hw	24	131	
25	35	Pudukuppam - Hw	24	131	
26	36	Pudukuppam - Hw	24	131	
27	37	Pudukuppam - Hw	24	131	
28	38	Pudukuppam - Hw	24	131	
29	39	Pudukuppam - Hw	24	131	
30	40	Pudukuppam - Hw	24	131	
31	41	Pudukuppam - Hw	24	131	
32	42	Pudukuppam - Hw	24	131	
33	43	Pudukuppam - Hw	24	131	
34	44	Pudukuppam - Hw	24	131	
35	45	Pudukuppam - Hw	24	131	
36	46	Pudukuppam - Hw	24	131	
37	47	Pudukuppam - Hw	24	131	
38	48	Pudukuppam - Hw	24	131	
39	49	Pudukuppam - Hw	24	131	
40	50	Pudukuppam - Hw	24	131	
41	51	Pudukuppam - Hw	24	131	
42	52	Pudukuppam - Hw	24	131	
43	53	Pudukuppam - Hw	24	131	
44	54	Pudukuppam - Hw	24	131	
45	55	Pudukuppam - Hw	24	131	
46	56	Pudukuppam - Hw	24	131	
47	57	Pudukuppam - Hw	24	131	
48	58	Pudukuppam - Hw	24	131	
49	59	Pudukuppam - Hw	24	131	
50	60	Pudukuppam - Hw	24	131	
51	61	Pudukuppam - Hw	24	131	
52	62	Pudukuppam - Hw	24	131	
53	63	Pudukuppam - Hw	24	131	
54	64	Pudukuppam - Hw	24	131	
55	65	Pudukuppam - Hw	24	131	
56	66	Pudukuppam - Hw	24	131	
57	67	Pudukuppam - Hw	24	131	
58	68	Pudukuppam - Hw	24	131	
59	69	Pudukuppam - Hw	24	131	
60	70	Pudukuppam - Hw	24	131	
61	71	Pudukuppam - Hw	24	131	
62	72	Pudukuppam - Hw	24	131	
63	73	Pudukuppam - Hw	24	131	
64	74	Pudukuppam - Hw	24	131	
65	75	Pudukuppam - Hw	24	131	
66	76	Pudukuppam - Hw	24	131	
67	77	Pudukuppam - Hw	24	131	
68	78	Pudukuppam - Hw	24	131	



Table 11: ANMs work plan from tribal PHC of Khammam

STATEMENT SHOWING THE PIN POINT PROGRAMME ACTION PLAN IN TSP AREA									
Name of the PHC		: Singareni							
No. of Sub Centres		: Seetharampuram							
Total No. of Habitations		4							
Total No. of Houses		790							
Total No. of Population		2950							
S. No.	Name of the Sub Centres	Name of the MPHA(F)	Revenue Villages Under Sub Centre	Habitations under Revenue Village	Habitation wise		Day of Visit	Day of UIP Session	Remarks
					Houses	Pop			
1	Seetharampuram	D. Dhanalaxmi MPHA (F)	Usirikayalapalli	Seetarampuram	284	1055	Monday Wednesday Friday	2nd Wednesday	
2	- Do -	- Do -	- Do -	Thodithelagudem	199	706	Tuesday Thursday Saturday	2nd Saturday	
3	Seetharampuram	K. Kotamma 2 MPHA (F)	Usirikayalapalli	Panthulnaikthanda	126	499	Wednesday Friday	4th Saturday	
4	- Do -	- Do -	- Do -	Tekulagudem	181	690	Tuesday Thursday Saturday	4th Saturday	
	Total				790	2950			

The following Sections present the results from the in-depth interviews and ANMs FGD. Each Section explains the key domain studied, namely 1) Daily work functioning 2) Time management and work planning 3) Recording 4) Supervision 5) Meetings 6) Physical health of ANMs and work 7) Trainings 8) Schemes and policies of the government 9) Suggestions given by FLHWs, ASHAs and officials.

6. DAILY WORK FUNCTIONING OF ANMs

In the process of the ANMs daily work functioning, on one hand there were factors which facilitated her routine work while on the other hand there were challenges which impacted the smooth functioning of her work. The following Sections deal with a detailed description of the same as generated through qualitative methods used as a means of field level inquiry.

6.1 Facilitative factors for ANMs in accomplishing daily work tasks

Among the top five stated facilitative factors for ANM functioning (Table 12), four factors were consistently stated across the three districts from the two states. These were 1) Co worker's support 2) Community support 3) Family support and 4) Transportation. Some of the other top five factors that emerged were a clear work plan, good infrastructure and school support in Srikakulam, Chittoor and Khammam respectively.

An ANM, Srikakulam shared about support received from co workers. She said,

Along with other ANMs, we have divided the villages to complete our house visits. During camps, 1st ANM conducted medical camp in the area and I supported her in what she requires in terms of logistics, coordination with ASHAs etc.

In the tribal cluster PHC of Srikakulam, co workers support received from MPH-W-M was very obvious (Photo story on worker support coordination). As observed by the data collection team, the MPH-W-M and ANMs jointly conducted house visits and school health programmes. Health supervisors supported ANMs on special days (like UID) and routine service delivery days mainly in undertaking logistic arrangements.

The ANM, Chittoor spoke about the support received from most grassroots functionaries at the village level i.e. AWWs and ASHAs. She mentioned, ‘AWW and ASHA help me greatly in mobilising the community for special days and routine service delivery related functions’.

Another ANM from Chittoor shared ‘If there is no ASHA then AWW and helper will help a lot’. In Khammam, ANMs spoke about co worker’s support largely in the context of ASHAs and need for ASHAs was felt even more strongly because of the ongoing state wide ASHA strike. An ANM, Khammam shared, ‘ASHAs help in doing the field work. They provide information about the village health and mobilise the patients to the sessions.’

Table 12: Facilitative factors as stated by ANMs in smoothly carrying out daily tasks in study districts

SRIKAKULUM		CHITTOOR		KHAMMAM	
Item	Smith's S	Item	Smith's S	Item	Smith's S
1. INTERPERSONAL FACTORS AND COMMUNITY RELATED					
Co worker's support	0.778	Co worker's support	0.624	Co worker's support	0.828
Community support	0.611	Community support	0.753	Community support	0.689
Family support	0.181	Family support	0.133	Family support	0.283
				School support	0.100
1a) OTHERS					
School support, Community awareness, Self-motivation		School support, knowing locally spoken language, beneficiaries support		None	
2. HEALTH SYSTEM RELATED FACTORS					
Clear work plan	0.021	Transportation	0.033	Transportation	0.089
Transportation	0.042	Infrastructure	0.073		
2a) OTHERS					
Health facility location, Work atmosphere, Supervision		Health facility location, District health system support, Adequate stocks supply, Regular medical camps		Stocks supply, Infrastructure, Health facility location	

3. OTHER FACTORS	
None	Political support
REFERENCE TO PHRASES USED	
<ul style="list-style-type: none"> • Co workers support signifies support received from other ANMs, AWWs, ASHAs, MPHWs- M, Supervisors and MOs. • Community support received through women groups, PRIs etc. • Family support mainly from husband and in-laws. • School support received from school teachers and authorities. • In Srikakulam, transportation refers to availability of a jeep which is available at the PHC in the tribal area based on the SPHOs permission whereas in Chittoor it refers to good and frequent public transport. • Health facility location is a facilitative factor for ANMs because of the proximity of house to the SC and PHC. • Work atmosphere implies hygiene and cleanliness of their workspace. • District health system support signifies support received from the cluster level and SPHO. • In Chittoor and Khammam, stocks supply implies availability of vaccines on time. • Locally spoken language was a facilitative factor in Chittoor since the Satyavedu cluster is located at the Tamil Nadu state border and the ANMs are fluent in both Tamil and Telugu. 	

From in-depth interviews it clearly emerged that the most important perceived facilitative factors for ANMs carrying out their daily tasks smoothly at work were inter-personal and community related factors rather than health system factors. There were a few other factors as well, with less significant Smith’s S value, that were mentioned across the districts as mentioned in Table 12. While ANMs in Srikakulam emphasised community awareness, self-motivation and supervision; Khammam ANMs focused upon infrastructure, supply of stocks and political support.

During the FGD with ANMs, four key facilitative aspects emerged which were thematically similar to the findings from the interviews. These were,

1. Locally spoken language
2. Community support
3. Co workers support and
4. Supervision

Additionally, the ANMs mentioned good state of physical health as facilitative to their daily work functioning.

ANMs said that as they were able to converse with the community in the local language they were better able to associate and convey the intended message. Community support was widely acknowledged by each of the ANMs as a significant aspect of their functioning. The rapport shared with the community helped in friendly communication, which was positively

accepted by community members. If any issues were found, it was brought to the notice of community leaders and other elders. And through their intervention with repeated meetings, the problem was resolved.

One ANM mentioned '*We work in community with empathy*' which is a very vital component to bond with the community and deliver health services. As unanimously expressed, various groups within the community like women's group, SHGs, youth groups were very supportive of the ANM's work. One ANM from the group shared,

Cooperation and coordination from the community helps us to work hard. In some cases like during immunisation or health camps or NHDs, community people do not come to the centre for service utilisation. In such cases, the village president or community leaders help us in dealing with those difficult to handle cases and motivating beneficiaries in order to utilise services from health facilities.

An ANM from the group added a very important dimension to community support. She said '*We understand community cultures and traditions. Accordingly we work with the community*'. In Srikakulam, community specific health beliefs, health practices and cultures had emerged as one of the major points of friction, causing non-adherence to advice.

Co workers support was widely acknowledged by ANMs in the FGD group as well. ANMs unanimously said,

ASHAs help in community mobilisation for all service delivery activities. They support us in field level activities and accompany us during field visits. ASHAs bring information related with the village community like births, deaths, cases of disease, new ANC women to be registered etc.

ANMs also emphasised on supervision provided by supervisors. ANMs said '*Supervisors help in giving early information about new programmes and trainings. They also assist in problem solving at the community level.*'

6.1.1 ANMs work environment and job satisfaction

Of the total number of ANMs, 76.7 per cent agreed (agree and strongly agree) that their work environment and conditions were very healthy and comfortable (Figure 10 a). Similarly, 83.7 per cent of ANMs were satisfied (satisfied and highly satisfied) with their job (Figure 10 b).

As observed and shared by ANMs during interviews, they spoke about various health system related factors and inter-personal factors which impacted their overall job satisfaction and functioning. However, when ANMs were asked directly about the same through close ended questions they largely agreed that they had healthy, comfortable work conditions and job satisfaction. It suggests although they had constraints and challenges in delivering their services and achieving targets overall they were satisfied with the people and the environment they worked in. Probably providing support to ANMs and helping them organising their work better may help achieve better targets.

Figure 10 (a): Work environment conditions

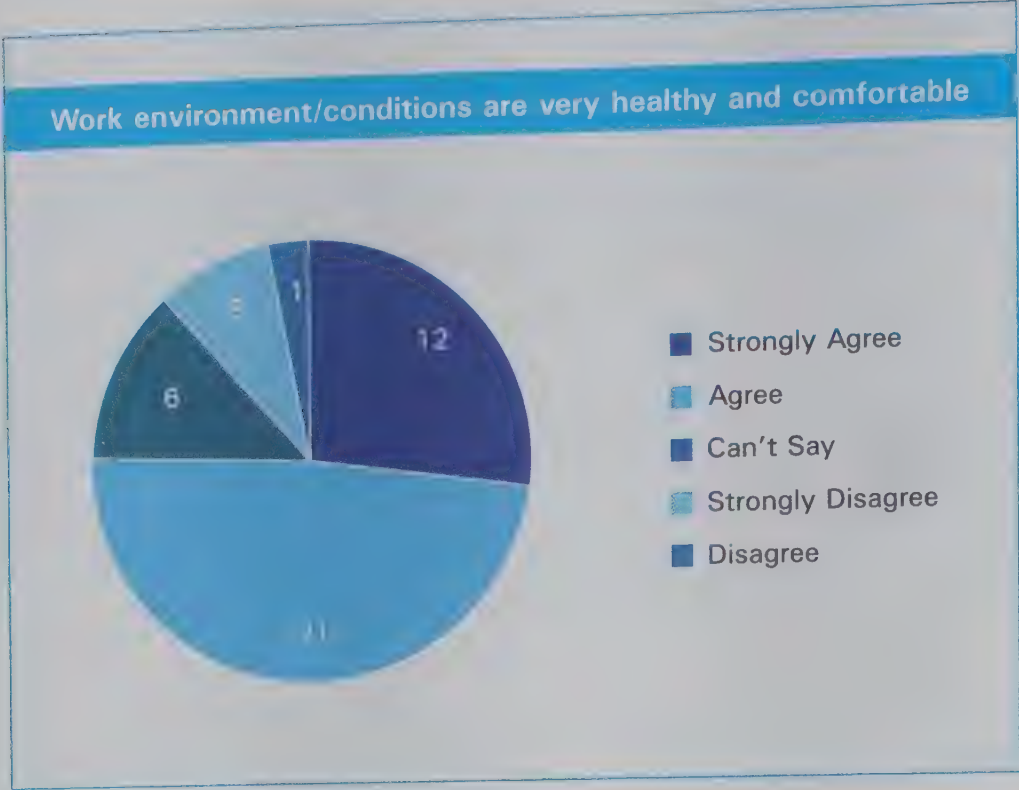


Figure 10 (b): ANMs job satisfaction



6.1.2 Support received from AWW: Convergence between Health and ICDS Scheme

During interviews, ANMs repeatedly said that support received from co workers was facilitative to their daily work functioning. One of the co workers on whose support ANMs counted upon were AWWs. The AWWs support ANMs in certain key ways like:

1. Community mobilisation.
2. Coordination with ASHAs (and ANMs) for village level health, sanitation and nutrition related aspects.
3. Identification of new cases (ANC women, children to be immunised, PNC women, eligible couples, individuals suspected to be affected with seasonal diseases, HIV, leprosy etc.).
4. Support during special events and days like Pulse Polio, NHD, village level surveys like Mission Indradhanush from the Department of Health conducted in Khammam, Rashtriya Bal Swasthya Karyakram (RBSK) conducted by the Government of AP including Chittoor for child health screening from birth to six years focusing upon birth defects, deficiencies and childhood diseases.
5. Health education and awareness building.

An **ANM, Srikakulam** shared about the AWWs holistic involvement in her daily work with the community. She said,

The AWW helps during immunisation and NHD days. The AWW takes the weight of the child and notes down the measurements. She also does community mobilisation along with the ASHA for the event. With the helper's help, the AWW looks after cooking of food to be given under SNP which is necessary for good health and nutrition of beneficiaries.

During special events and special activity days, the support received from AWWs is very significant. The AWWs and ASHAs are from the same village and are more aware about the health and nutrition related condition of the community. An **ANM, Chittoor** shared, '*AWW helps during Pulse Polio event. She is the coordinator for respective AWC and administers polio drops to children. They share complete details and database with respective ANMs*'.

During the ANMs' FGD, one of the ANMs mentioned an important aspect related with AWW involvement and enhanced coverage,

AWW helps us in village level surveys. Along with ASHA, she gives us firsthand information about ANC women and eligible couples to be registered, houses with PNC women, houses with children who have missed/ dropped out of immunisation and need intervention etc.

The AWWs role is very significant in generating community awareness and imparting health and nutrition related education to the community. An **ANM Khammam** shared,

The AWW educates lactating women on the importance of breast feeding. Because of rapport shared with the community she is better able to communicate with beneficiaries and remains in close touch with them through the ASHA's support.

Through TAM observations, though quantitatively time recorded for activities (NHD, role of AWW as health facilitator etc) which display convergence between health and ICDS is very low the ANMs during interviews and FGDs, reiterated the support received and convergence between the two cadres of workers.

6.2 Challenges faced by ANMs in accomplishing daily work tasks

Lack of community support, poor infrastructure and difficulty in travel appeared in the top five challenges across all the three districts (Table 13). The issue of infrastructure was at the level of lack of government owned buildings and facilities. Instead of government SC buildings, premises were rented with limited space and no facilities like regular water supply, electricity, examination table and other furniture etc.

ANM, Khammam mentioned,

We don't have our own SC building and the present building I am staying in is on rent. There is no fan and no proper space for the ANC (women) and PNC (women) to sit. There are no chairs and tables and ANC women find it difficult to sit down.

Another ANM, Khammam shared '*We are given only Rs. 300/- for the rent of the SC and that too has not been given since the last two years and they say that the fund have not released from the state*'. The ANM was paying rent sometimes by herself and other times with the help of the community. **As observed in Chittoor**, SC buildings were largely non-government ones taken on rent. Two of the SCs from the non tribal cluster were running from the same premises as the AWC.

ANMs found transportation a challenge because of various aspects like unavailability of modes of transportation, lack of personal vehicle, bad state of roads during the rainy season, and, connectivity to remote tribal and hilly areas etc (Photo story on transportation).

An ANM, Srikakulam expressed,

I work in a tribal region. Habitations are very scattered located up in the hill. It is not only difficult to get transport to reach the facility but also climb up the hill. During rains it becomes even more difficult.

PHCs from tribal and non tribal clusters of Srikakulam presented a good contrast in terms of the transportation challenges faced by ANMs. The non-tribal cluster PHC was in the plains with remote but accessible locations and less frequent public transportation. Travelling to interior villages from the main road was quite challenging and time consuming. However, the tribal cluster PHC was located in hilly terrain. Villages and tribal habitations were not only remote but also highly inaccessible because of the hills. Public transport was less frequent. Reaching tribal habitations up hill was challenging; the only way to travel was to walk through *kaccha* or no roads. PHCs from Khammam and Chittoor were located in the plains but transportation was a challenge because of the lack of adequate means of public transport. Travelling was much more of a challenge amidst the scorching heat and high temperatures during summers.

The **ANMs in Srikakulam** mentioned the problem of violence because of some alcoholics from the community and the ANMs lack of training as other top challenges. **ANMs in Chittoor** felt that carrying vaccines and accompanying beneficiaries, as and when required, hampered their routine tasks. While in Khammam ANMs mentioned that other non-planned tasks and above that vacant positions put extra burden on them. This did not allow them to carry out their routine activities.

Other tasks (Smith's S 0.340) was the second challenge as listed by ANMs from Khammam. This comprised of not only other department works, but also work tasks within the health domain itself which were outside the purview of their job description.

An **ANM, Khammam** brought to forward an important linkage between vacant positions at the PHC and allocation of job responsibilities to her which were outside her job description. This certainly compromised her routine work functioning and tasks. She said,

I was actually appointed only for the field. But I have been allocated outpatient PHC duties when there is no staff.

Likewise another **ANM from Khammam** shared '*I have to attend to additional duties like outpatient and surveys, sometimes discharging duties at other SCs, and discharging emergency duties at the PHC*'.

The issue of vacant positions (Smith's S 0.301) was repeatedly mentioned by ANMs. An **ANM from Khammam** articulated,

There is no 1st ANMs at this place so I have to maintain all the work like updating the cards and giving vaccinations etc. It takes a long time and even beyond 4 pm at times to complete all these tasks. I am provided with very little time for conducting the surveys and for submitting the report on time. As I am the only worker so it takes me more time. We are given very little money for doing the tasks and thus cannot even afford to keep a person to do additional work.

Similarly, an **ANM from Srikakulam** expressed that the lack of a 2nd ANM certainly overburdens her. An **ANM Khammam** shared the importance of the MPHW-M for her work. She said '*There is no male worker, so I have to bring the vaccination kits and medicines by myself which is a problem*'. **As observed by the field team**, the contractual nature of the 2nd ANM posting, vacant positions of ANMs and MPHWs-M, introduction of newer multiple health programmes and initiatives pose a lot of challenges and add up to multitasking by ANMs. In Chittoor, as revealed during field level interactions, many ASHAs had dropped out in recent times mainly because of incentives not being paid on time and being called to SCs on almost a daily basis. Daily coming to the SC casues inability to go for daily wage work which, in general, is the regular source of income for ASHAs. An **ANM from Chittoor** shared the implications of vacant ASHA positions upon her work. She said,

The ASHAs presence is very important during village outreach. She is from the same village and knows all the health and non-health related details of the community. It helps not only in service delivery and wider coverage but also in doing regular follow ups.

Among other common factors multiple health programmes, meetings, inadequate stocks, records keeping, worker unavailability, work pressure, co workers non-support, community non-support, political factors etc. were listed.

The Srikakulam ANMs specifically mentioned that climate, difficult terrain, seasonal work like malaria screening and spraying, outbreaks or emergencies, different local tribal languages hindering communications, and traditional tribal community beliefs are challenges in carrying out daily tasks.

The Chittoor ANMs particularly mentioned their problems with the availability of ambulances. It was mentioned that because of no ambulance available at the PHC and with limited reach of 108 services it becomes very challenging especially during the night and is time consuming to reach the far off locations.

Khammam ANMs (especially 2nd ANM) found the low salaries a challenge. Some ANMs in Chittoor and Khammam mentioned that the online MCTS tracking system was an inhibitory factor. The MCTS was launched to ease the reporting, planning and follow up of patients by the ANMs and monitoring by the seniors. However the ANMs stated that it takes more time recording and ensuring information is entered in the PHC computer system, than allowing them to plan efficiently and deliver service. As expressed, this was mainly on account of the difficulty in handling tablets and using the software. It must be noted that difficulty in handling online MCTS tracking was expressed in spite of the ANM training.

The field data collection team had observed one such training session in Srikakulam. It was organised in a large group at the cluster level with one senior trainer from the state. Subsequent to the training, during field interactions ANMs did express the need of conducting the same in smaller groups with more personal teaching and supervision along with individual hands on practice with the tablets based on practical situations given. One of the officials from the Health Department, Chittoor during a field level conversation said that focus during trainings needs to be more intensive as all participants may not be able to grasp the lesson quickly.

Table 13: Challenges as stated by ANMs in smoothly carrying out daily tasks in study districts

SRIKAKULAM		CHITTOOR		KHAMMAM	
Item	Smith's S	Item	Smith's S	Item	Smith's S
1. HEALTH SYSTEM RELATED FACTORS					
Difficult transportation	0.583	Difficult transportation	0.444	Poor infrastructure	0.380
Training	0.200			Other tasks	0.340
Poor infrastructure	0.133	Infrastructure	0.317	Difficult transportation	0.283
		Carrying heavy vaccine kits	0.102		
		Accompanying beneficiaries	0.131	Vacant positions	0.301
1a) OTHERS					
Emergencies/ outbreaks, Carrying heavy vaccine kits, Multiple health programmes, Records maintenance, Accompanying beneficiaries, Vacant positions, Work pressure		Stocks inadequate supply, Sudden meetings, Online MCTS tracking, No 108 ambulance service, Emergencies/outbreaks, Records maintenance		Carrying heavy vaccine kits, Sudden meetings, Stocks inadequate supply, Records maintenance, Low salaries, Online MCTS tracking, Health facility location	
2. INTERPERSONAL FACTORS AND COMMUNITY RELATED					
Lack of community support	0.100	Lack of community support	0.140	Lack of community support	0.161
Violence and alcoholism	0.108				
2a) OTHERS					
Locally spoken language, Lack of co workers support, Local community beliefs		Physical health, Violence and alcoholism, Inadequate community awareness		Physical ill health, Family support, Lack of co workers support, Inadequate community awareness, Locally spoken language	

3. OTHER FACTORS		
Climate, Political interference, Seasonal occupations of villagers	Strikes	None

REFERENCE TO PHRASES USED		
<ul style="list-style-type: none"> Difficult transportation: In Srikakulam with reference to difficult transportation, two kinds of scenarios were presented. In the nontribal PHC area it was difficult because of remote but accessible locations and less frequent public transport. While in the tribal PHC, transportation and thus travel was difficult not only because of remote but also inaccessible locations. The terrain was largely hilly with scattered tribal habitations up in the hills where reachingthem was highly challenging. In Chittoor and Khammam, transportation was found to be a challenge because of reasons like less frequent public transport, lack of personal vehicle etc Locally spoken language was a challenge to ANMs especially in the tribal PHCs of Srikakulam and Khammam because the population was largely tribal with their own dialect different from the Telugu language as understood and spoken by the ANMs. The ANMs serving in the non tribal cluster PHC of Srikakulam also expressed that communicating with the villagers was a challenge. This is because of they are located on the border withOrissa and locally Oriya is understood and spoken while ANMs could communicate only in Telugu Accompanying beneficiaries was enlisted as a challenge mainly because of no accommodation facilities being available for accompanying ANMs at the health facilities. Moreover they also had to incur daily travel expenses from their own pockets. In the tribal PHC of Srikakulam it was even more difficult because of the remoteness of the locality and difficult to reach hilly terrain Poor infrastructure: In the context of Chittoor infrastructure was listed as a challenge mainly because of the lack of government owned infrastructure Carrying heavy vaccine kits emerged mainly because of the issue of transportation and going to the PHC to get the kit and further outreach in the field was challenging Stocks supply: In terms of availability and supply of medicines and vaccines Other tasks: In Khammam, ANMs were engaged inMission IndhradhanushSurvey activity at the time of the study. It also signified work tasks such as TB identification and smear preparation which the ANM had to do because there wasno MPHWM. ANMs also shared that they were also allocated PHC duties when there was no staff Records maintenance was a challenge because of the large number of registers and duplication of information. For e.g. ANMs in Srikakulam clearly presented a case of immunisation related formats and registers to be maintained with duplication of information. Lack of Co workers support: In Srikakulam it was saidin the context of ASHAs where a few of them were not helping in health service delivery work done by ANMs. In Khammam, the 1stANMs clearly asked for more support from 2nd ANMs Online MCTS tracking: In Chittoor it was considered a challenge by ANMs because online tracking through tablets had beenrecently introduced with a daylong cluster level training but they were still not very well versed with using it. In Khammam, it was expressed as a challenge mainly because of the amount of time consumed in online updatingof data manually in computers at the PHC (in Telangana tablets hadnot been introduced at the time of the study). This in turn impacted their routine field plan and tasks Violence created by some alcoholics in the community emerged as a major community related challenge in Srikakulam tribal cluster PHC.Few of the drunken villagers were a security threat to the ANMs mainly because of violence created. During outreach, people from habitations often complained about weaknessand dehydration which was mainly because of excessive alcohol consumption. Oral rehydration solution was given under such circumstances. 		

- **Lack of community support** across the three districts has been counted mainly in terms of reluctance on the part of beneficiaries to avail health services provided by health facilities, and lack of adequate support from local village authorities. In the tribal cluster PHCs it was even more common because of indigenous tribal practices and beliefs which made it difficult for ANMs to reach out to them with mainstream allopathic treatment
- Awareness in the community was largely lacking and there was a reluctance to adopt healthy practices. There was firm belief in the services provided by Rural Medical Practitioners which also created myths among villagers. As shared, it was difficult for ANMs to explain the elders of the village, certain myths that had with reference to health and hygiene
- **Emergencies/Outbreaks** were found to be a challenge because at the very onset of any outbreak a high alert was announced in the entire district with all efforts concentrated towards curbing the same. As shared by ANMs this in turn impacted their own routine work plan
- **Physical health** was expressed as a challenge in Chittoor and Khammam mainly because of the nature of strenuous field level work and the ANMs state of health
- **Political interference** was expressed as a challenge by an ANM from Srikakulam mainly because of interference by local political parties

The FGD with ANMs, revealed factors which were a mix of health system, inter-personal and community related factors, similar to interviews. These were:

1. Carrying heavy vaccine kits.
2. Difficult transportation.
3. Records maintenance.
4. Lack of community support.
5. Physical health.
6. Poor infrastructure.

Additionally, ANMs also expressed that literacy of the co worker was very crucial and could be a challenge in case the ASHA was illiterate. One of the ANMs from the group expressed,

Whenever there is an illiterate ASHA she adds extra burden on the ANM. We have to do her share of reporting work and it consumes more of our time in explaining activity details to them.

Carrying heavy vaccine kits and equipment to the field was not only time consuming but also tiresome for ANMs. ANMs unanimously mentioned,

We have to carry smear collection kit, blood pressure apparatus to the field along with medicines. They are heavy to carry to the field and consume time because we have to go to collect them and drop them back at the PHC after activity.

It became more challenging coupled with the problems in transportation. Participant ANMs in the FGD were serving in a tribal cluster PHC which was in the plains. Transportation was an issue mainly because of unavailability or low frequency of public mode of transport.

Through the ANMs FGD a crucial aspect with respect to records maintenance emerged. The ANMs found it difficult to prepare such unfamiliar reports. The ANMs said,

State and district level officials send some formats and ask reports to be sent on an immediate basis, many a times on the same day. We have to stop the day's activity in order to complete the report work. Sometimes format is not self-explanatory either.

7. TIME MANAGEMENT AND WORK PLANNING BY ANMs

The TAM study essentially endeavours to study the management of time by 1st and 2nd ANMs, MPHws-M and AWWs in performing various activities based on their job descriptions. Based on field experience and a series of interviews conducted with ANMs, it was realised that 'time management concept' was more of an abstract term for ANMs. It was quite subjective and the definition largely depended upon the ANMs' perception of their daily routine work. A need was felt to change the approach to capture this information. Thus, during the second round of field visits to Khammam the ANMs were engaged through a participatory activity using Venn diagrams.

During the activity, ANMs were asked to represent activities consuming most of their time in a week through biggest paper circle cut out followed by filling up of activities in decreasing order of time consumed in other circle cut outs with descending order of size. The ANMs expressed that the following five activities consume most of their time in a week in descending order (See photograph below).

1. Immunisation.
2. Home visits comprising mainly of ANC/PNC women, child health follow ups.
3. Seasonal diseases/epidemics/outbreaks related surveys, identification work etc.
4. Records and reports.
5. Maternal health i.e. ANC clinic.

Through TAM observations of ANMs similar findings emerged wherein immunisation and home visits consumed the maximum amount of average total time spent per week per ANM. Records and reports have emerged as the fourth highest component here which directly corroborates with the TAM observations of the ANMs. In time utilisations recorded for ANMs, among categories of activities within programmatic, programmatic support and other domains, records and reports were the third highest categories of activities consuming ANMs over-all time (total travel, direct service to beneficiary, records and reports respectively in top three).

Venn diagram representation of top five activities consuming ANMs maximum time in a week



In the process of understanding the time management by FLHWs it is important to recognise the roles and responsibilities as perceived by ANMs, various facilitative factors and barriers which act in synchronisation and define overall management of time by FLHWs. The Section below presents the same in detail.

7.1 Perceived roles and responsibilities of ANMs

The ANMs shared some key roles and responsibilities as perceived by them, they are: 1) Maternal health related i.e. conducting ANC women registration, checkup, follow ups with PNC women, child immunisation etc. 2) Assist in 104 services.⁹ 3) House to house surveys. 4) Communicable diseases related i.e. smear collection, DOTS treatment. 5) Curative services i.e. tablet distribution. 6) Conducting group meetings with PRI members and the community, as required. 7) Coordination with AWWs for NHD etc. 8) Hygiene and sanitation measures like chlorination etc. 9) School health. 10) Births and deaths registration. 11) Reproductive health related i.e. identification of eligible couples.

7.2 Factors facilitating effective management of time by ANMs

Among the top five factors facilitating effective management of time by ANMs (Table 14), four factors were found to be consistently stated across the three districts from the two states. These were 1) Community support. 2) Co workers support. 3) Family support. 4) Transportation. A mix of inter-personal and health system related factors like worker motivation, school support and work planning were other factors in the list of top five in Srikakulam, Chittoor and Khammam respectively.

As shared by the ANMs across the three districts, community support was extended in various forms - through village groups, selfhelp groups (SHGs), village leaders and PRI members like the Sarpanch etc. Support from the community also helps in generating awareness regarding issues effectively and counters any kind of resistance which comes up. This certainly helps ANMs in managing their time very well with the given set of responsibilities. An ANM Khammam, mentioned,

As I belong to the same village so when I go for house visits, I receive a positive response from the villagers. I also find good co-operation from the village community heads due to which I am able to motivate the people quickly and easily so I save more time. Good coordination with beneficiaries also helps me.

An **ANM from Srikakulam** mentioned the support received from the Co workers and community, which in turn facilitated her effective management of time. She said '*If there is any programme in the village then the AWW and village community people come and help in conducting the programme*'. **ANM Chittoor** shared an aspect associated with support received from beneficiaries from the community. She said '*If the patients come on time, they can complete the sessions very early and even find time for doing other tasks*'. **ANM Khammam** mentioned the importance of village PRI members in accomplishing tasks effectively on time. She said '*Sarpanch helps them in arranging the programmes*'.

Co workers support was counted in terms of support received from AWWs, ASHAs, supervisors, other ANMs and MOs. An **ANM from Khammam** said '*The ASHA and 2nd ANM stay at the SC and help in carrying out activities even when I am late. If there is any programme in the village then the AWW and village community people come and help in conducting the programme*'. A clear supportive working relationship was acknowledged between the 1st ANM and 2nd ANM by a few of the ANMs. An **ANM from Chittoor** mentioned that her 1st ANM supports her a lot in the work. The ASHA has been also found greatly helpful to ANM work as shared by **ANM from Srikakulam** '*ASHAs support us in bringing up the new cases. When we conduct house visits, we get support from ASHAs in calling the people and in updating the details*'. Likewise support provided by seniors like supervisors was also found to be very helpful to ANMs. The **ANM Chittoor** shared '*Supervisors help in conducting camps and in other programmes*'. A **Khammam ANM** shared '*Supervisors pass information as soon as I ask and this helps me in doing work quickly addressing those issues*'.

Among other factors, in Khammam District, specifically with reference communication, ANMs found availability of phone very significant. **ANM Khammam** shared '*Intimating and informing about villagers about vaccination through phone and prior work done by AWW by spreading the information greatly helps in work*'.

⁹ The 104 services were launched in the united AP in February 2008. These services are aimed at providing PHC services like treating chronic diseases, maternal and child healthcare services to the public of rural and remote areas in the State. The mobile medical units and 104 teams visit villages on a fixed day in every month. They conduct medical camps, screen the patients, distribute medicines and refer those people who require more medical attention to the nearby area hospital. In every 104 team, there is a staff nurse/ANM, lab technician and pharmacist in the vehicle besides other supporting staff like ASHA workers.

Table 14 below encapsulates various factors facilitating management of time by ANMs along with contextualisation of key phrases used.

Table 14: Factors facilitating management of time as stated by ANMs

SRIKAKULAM		CHITTOOR		KHAMMAM	
Item	Smith's S	Item	Smith's S	Item	Smith's S
1. INTERPERSONAL FACTORS AND COMMUNITY RELATED					
Community support	0.442	Community support	0.378	Co workers support	0.548
Co workers support	0.744	Co workers support	0.378	Community support	0.534
Family support	0.333	Family support	0.228	Family support	0.509
Worker motivation	0.038	School support	0.056		
1. a) OTHERS					
Programme ownership, Work experience		Locally spoken language, Good physical health, Worker motivation		School support, Locally spoken language	
2. HEALTH SYSTEM RELATED FACTORS					
Transportation	0.064	Transportation	0.172	Transportation	0.260
				Work planning	0.293
2. b) OTHERS					
Regular stocks supply, Work planning, Training		Regular stocks supply, Health facility location, Work planning, Records maintenance		Regular stocks supply, Health facility location, Records maintenance, Communication clarity	
REFERENCE TO PHRASES USED					
<ul style="list-style-type: none">• Stocks supply: in terms of availability and on time supply of medicines• Health facility location: being close to ANM residence which in turn saves ANMs home to field/centre-home travel time• Work planning: through defined action plans ANMs knew where to go on which day• Records maintenance: ANMs found periodic updation of records as a facilitating factor in time management• Co workers support: In Srikakulam, ANMs signified Co workers support as support received from ASHAs, AWWs, MPHW-M, other ANM and PHC staff In Khammam, ANMs mentioned that the AWW quickly spreads information in the village which helps in mobilising beneficiaries in a given amount of time					

- **Communication:** ANMs from Khammam shared that clear communication facilitates their time management in two ways. Firstly, from supervisors information is passed on quickly which helps them to do work quickly. Secondly, through phone communication with beneficiaries and they are informed about the vaccination schedules, health check up plans for ANC and PNC women etc
- **Transportation:** In Srikakulam two ANMs found transportation a facilitative factor. One ANM was staying in the vicinity of the tribal PHC/SC so reaching the facility was easier through auto or by walking. Another ANM had her own two wheeler which made travelling much easier for her. In Chittoor, the ANM shared the bus facility made available from PHC (non-tribal PHC) to respective SCs and surrounding areas. Then the ANM had to walk about half a kilometre to reach the SC. In Khammam, ANMs were either dropped by their husbands or local villagers with bikes which made transportation easier
- **Community support:** was counted at the level of support received from beneficiaries, local villagers, community groups including women groups, local community leader, Sarpanch/PRLs etc
- **Programme ownership:** The ANM from Srikakulam expressed that a sense of responsibility drives her forward with the realisation that it is a service to mankind
- **Work experience:** For an ANM from Srikakulam her years of service as ANM helps her to plan and execute tasks better along with dealing with people and Co workers
- **Programme ownership:** The ANM from Srikakulam expressed that a sense of responsibility drives her forward with the realisation that it is a service to mankind
- **Work experience:** For an ANM from Srikakulam her years of service as ANM helps her to plan and execute tasks better along with dealing with people and Co workers
- **Locally spoken language** was an advantage for ANMs serving in nontribal PHC of Chittoor located near the Tamil Nadu border. It enabled ANMs to communicate easily with the community and also make them understand benefits of health service delivery through SC/PHC and utilisation of the same
- **Worker motivation:** Motivation received from seniors like the MO, and supervisors acts as a strong non-financial incentive for ANMs to perform better and deliver health services

7.2.1 ANM work support and coordination with co workers from health department

As presented above, support received from co workers had essentially emerged across the three districts. In this reference, ANMs were asked to specifically share the support and coordination which exists with other ANMs, ASHAs and MPHWM.

Through qualitative interviews and ANMs FGD, findings have been indicative of close work support between the 1st and 2nd ANM. The major ways through which the practicing ANM pair operated in the health service delivery were:

1. Sharing the work tasks.
2. Demarcation of field area in terms of villages to be covered but nature of field work remains same for both ANMs in their areas.
3. In the situation of multi-tasking for example on Immunisation Day while the 1st ANM was engaged in filling up records and talking to beneficiaries the 2nd ANM was engaged in immunising children with support from the ASHA.
4. Records are maintained individually by both ANMs.

As observed, much of the task sharing was based on feasibility and field based requirements rather than any fixed plan as such. During FGD, the ANMs shared,

We as ANMs share our work at the SC level, wherever 1st and 2nd ANM are posted. One ANM conducts the activity while the other ANM is engaged in records maintenance and counseling. Wherever only one ANM is posted they are facing problems in completion of activities on time.

Similarly on being asked about coordination with MPHW-M, while 34.9 per cent ANMs (15 ANMs) agreed to have had coordination with MPHW-M, 58.1 per cent (25 ANMs) disagreed with it. Findings reveal that in Srikakulam, nine of 13 ANMs reported to have had coordination with MPHW-M for accomplishing work while four ANMs found no coordination. In Chittoor, six ANMs from the only PHC where a MPHW-M was posted stated that coordination existed between the two of them. In Khammam, none of the sample PHCs had a MPHW-M.

During FGD the ANMs shared '*No MPHW-M is working in PHC but if he would have been posted it would have been of great help to us during immunisation in transporting immunisation kits to SCs and back to the PHC*'. As shared during various informal interactions in the field, ANMs perceived health service delivery work as being largely reduced to maternal and child health. However, during TAM observations, maximum time spent per week per ANM was on UID, home visits, others, school health and maternal health (respectively). ANMs expressed that in the community there are many other target groups like adolescents, men, old age people who are often left out. Curative service for general ailments is the main service they get from the health facility. In order to serve other target groups, apart for health and sanitation measures and disease control programmes, the MPHW-M can be of use. He can give support in transportation and for security as well especially when ANMs visit remote locations. Thus, it was clear from the field interactions and observations that ANMs did feel the support of a MPHW-M and coordination with him was crucial for their work but largely because of vacant position(s) it remains a challenge. However, in the tribal PHC Srikakulam this support and coordination was largely visible and expressed as well (Photo story on worker coordination). **Sociologist Adams** (2010) notes traditional gender division of professional labour exists in health care work. The study revealed that on the ground largely a female cadre of health workforce existed with very few MPHWS-M for service delivery functions. A phenomenon of feminisation of health care workforce for primary health care delivery was obvious across the PHCs.

The ASHA is another cadre which is one of the basic foundations of health service delivery at the grassroots level. ANMs clearly acknowledged the presence of ASHAs as vital for their functioning in various significant ways like connecting with the community and mobilising them to avail health services, bringing firsthand information about new cases, health status of the community and births and deaths in the village, liaison with village leaders and PRI representatives, provide support during home visits, special drives and event days like surveys, NHD, Immunisation Day etc. In the domain of maternal health, ANMs rely heavily upon ASHAs. During the FGD with ANMs, the group reported '*ASHA helps in sharing village level information. She helps in identification of new ANC women, follow up cases of PNC women, follow ups of high risk cases etc*'. An **ANM from Chittoor** counted heavily upon ASHAs to accompany them with beneficiaries to the health facilities.

7.2.2 Awards/rewards and ANM motivation

ANMs from the three districts were specifically asked to share information about any rewards/awards they might have received for their service, from the district or sub-district or Mandal level administration. Thirty eight out of 43 ANMs said that they had not received any rewards/awards for their service. Further analysis revealed that none of the ANMs from Srikakulam reported to have received any award/reward for their work done as ANM while three of 15 in Chittoor and two of 15 in Khammam had received awards/rewards. ANMs and officials told the data collection team during field interactions, that non-financial incentives in the form of awards and rewards did act positively towards workers motivation to work and function well.

7.3 Factors which pose challenges in effective management of time by ANMs

Across the three districts, transportation emerged as a common challenge faced by ANMs which in turn impacted their time management. It operates in various ways, for example, the lack of availability of on time public transportation, lack of personal vehicle, bad connectivity during the rainy season, remote locations, longer within field distances etc. In Chittoor, the issue of transportation was reflected in two ways: reaching the SC itself and within field travel during field outreach. An **ANM from Chittoor** expressed the need for a vehicle for providing medicines when in the field. Another **ANM from Chittoor** shared *‘We have to walk two kilometres from the main road to reach the village and this creates a problem to reach the SC’*.

Climate related conditions in terms of hot days in summer and rains were expressed as common challenges in Srikakulam and Chittoor. An **ANM from Srikakulam** shared *‘If it rains most of the work is stopped’* which is further aggravated by bad transport and kaccha or no roads.

Similarly, meetings were found to be a common challenge in Chittoor and Khammam, in terms of their sudden unannounced nature, long duration, and timings coinciding with routine tasks. Vacant positions, variable influx of patients and lack of community support presented a mix of other inter-personal/community and health system related challenges in the category of top five. Likewise for Chittoor District, infrastructure (lack of permanent government SC building) and carrying heavy vaccine kits to the field with limited/no travel options and for Khammam District, other tasks, records and lack of community support emerged as major challenges in the top five category (Table 15).

In Khammam, ANMs shared that ‘other tasks’ were a challenge with highest Smith’s S value. An **ANM from Khammam** said,

If there is any other programme, then ANMs are allotted for doing that task by the MO and so they find it difficult to manage their time.

The extra duties at the PHC which are allocated to ANMs add to this. An **ANM from Khammam** shared *‘If they are allocated duty at the PHCs, they are unable to do their scheduled work and are unable to go on the field’*. In the district, keeping records was found to be another major challenge to their time management. An **ANM from Khammam** shared *‘On Immunisation Day I have to do both updating the cards and giving vaccination. As I am the only ANM at this location, so it takes me a long time’*. She clearly brought to the fore an issue of vacant positions linked with increased work load, reflected in terms of recording as one of the challenges

on special days. Another ANM from Khammam shared ‘Maintaining ASHA records increases additional burden’. An ANM from Chittoor brought spoke about a very crucial aspect associated with recording. She said ‘Due list has to be prepared along with other ANM, ASHA and AWW and I have to travel to all the places which is difficult.’

Health system related factors like stocks supply (Smith’s S 0.084), carrying vaccines (Smith’s S 0.111), infrastructure (0.127) were also found to pose challenges in effective time management by ANMs. The ANMs also mentioned a few other factors which challenge the effective management of time by them- 1) Physical health 2) Climate 3) Online MCTS tracking 4) Family support 5) Targets 6) Emergencies especially at night when they have to accompany beneficiaries and at the same time attend to their own families too.

Table 15: Challenges in effective management of time as stated by ANMs

SRIKAKULAM		CHITTOOR		KHAMMAM	
Item	Smith’s S	Item	Smith’s S	Item	Smith’s S
1. INTERPERSONAL FACTORS AND COMMUNITY RELATED					
Lack of community support	0.103	None		Lack of community support	0.189
1. a) OTHERS					
Seasonal village works, Community awareness		Community awareness, Family support, Lack of community support, Violence and alcoholism, Co workers support		Physical ill health, Family support	
2. HEALTH SYSTEM RELATED FACTORS					
Difficult transportation	0.526	Difficult transportation	0.567	Difficult transportation	0.540
Vacant positions	0.092	Carrying vaccines	0.144	Other tasks	0.457
Variable influx of patients	0.097	Meetings	0.161	Meetings	0.322
		Infrastructure	0.167	Records	0.206

2. a) OTHERS		
Infrastructure, Meetings, Epidemics/outbreaks, Health facility location, Multiple health programmes, Training	Accompanying beneficiaries, Variable influx of patients, Health facility location, Records maintenance, Stocks supply	Stocks supply, Carrying heavy vaccine kits, Infrastructure, Online MCTS tracking, Health facility location, Targets, Meetings

3. OTHER FACTORS

Climate	0.167	Climate	0.144	None
Communication		Strikes, Communication		Climate, Emergencies

REFERENCE TO PHRASES USED

- **Lacking co workers support:** In Srikakulam, the ASHAs resistance to getting involved in health service delivery was found to be a challenge
- **Poor community support:** Mainly from village community and beneficiaries. In the tribal PHC of Srikakulam, a few of the community members refused to cooperate with ANMs in health service delivery and going for institutional deliveries. The ANM reported an incident about her Co workers (MPHW-M) being beaten up while she was on outreach in a tribal habitation. In Khammam, a few of the villagers repeatedly do not come to the health facility and thus it is more time consuming for the ANM to follow up with them and deliver service. In Chittoor, the lack of community support emerged because of interference and opposition by local community leaders
- **Inadequate community awareness:** In Srikakulam, the lack of adequate awareness among community members because of illiteracy and reluctance to utilise health services delivery was found to be a challenge in time management. As expressed by ANMs, it took more time and more effort to convince and persuade the villagers
- **Seasonal village works:** In Srikakulam, the ANMs shared that as the villagers go to work in the agricultural fields so following up with them for health services delivery and their children for immunisation becomes difficult and time consuming. They end up going to the same household(s) for multiple visits
- **Communication:** ANMs from the tribal PHC of Srikakulam and non tribal PHCs of Chittoor found connectivity through mobiles and communication a major challenge because of the hilly terrain and thus weak signals. This also was an impediment in communicating in an emergency
- **Variable influx of patients** was expressed as a challenge in Srikakulam and Chittoor because of the differential load of beneficiaries approaching ANMs for health service delivery. It adds to their waiting time which could be utilised for other core functions
- **Multiple health programmes:** ANMs from Srikakulam found multiple health programmes and initiatives a challenge to their effective time management. This not only adds to their existing responsibilities but also leads to frequent multi-tasking in the field. It also increases work pressure which indirectly impacts routine functioning of ANMs
- **Records maintenance:** ANMs in Chittoor found multiple reports and formats time consuming since they not only involve duplication of information sought but also formats with no clarity in terms of how they need to be filled up (Photostory on Records maintenance)

- **Online MCTS tracking:** ANMs from Khammam mentioned that they had to go to the PHC in order to go online to update the data maintained in their registers. This not only involves dual reporting (registers and online) but also makes it difficult with no computer training and is time consuming since there is no data entry operator at the PHC. Many times supervisors assist them in updating the data or do it for them but this compromises their time which is supposed to be spent in supervision
- **Carrying heavy vaccine kits:** It becomes very difficult and time consuming for ANMs especially from very remote locations to come to the PHC on Immunisation Days to collect vaccine kits, carry them to the field and then come back on the same day to submit the same. It leaves very little time for actual field level operations
- **Targets:** ANMs from Khammam mentioned that reaching targets in a limited time was a challenge because of reasons like remote locations which consumes time in travelling and different health needs of the population
- **Meetings:** Often ANMs are called for sudden unplanned meetings which are very long and impact their day's routine and overall task management for the week since routine tasks are left pending
- **Training:** In Srikakulam ANMs asked for training in a range of areas which in turn impact their time utilisation. Lack of training makes it difficult for them to do basic functions like haemoglobin testing etc. In the tribal PHC, ANMs expressed the need to be trained in EmOC. In emergencies accompanying the beneficiary to a higher health facility may result in complications and loss of time
- **Physical health:** The ANMs ill health in Chittoor made it difficult for her to function in the field and at the facility level which in turn led to more time being utilised
- **Climate** was a challenge in time management in Srikakulam and Chittoor in two different ways. While in Srikakulam the rainy season made it not only difficult to travel but there were also widespread outbreaks which consumed more of the ANMs time. In Chittoor, the temperatures were extremely high resulting in sun strokes which made it difficult for ANMs to go out for outreach in the afternoons. Either remaining at the SC or finishing the day's tasks earlier with limited time for service delivery were the only options

7.4 Work planning by ANMs

The manner in which work is planned and executed by ANMs had a very crucial impact on the overall utilisation of time during the week and time management on a daily basis. Through interviews and FGD, the ANMs shared a few significant ways in which the work plan had been helpful to them. These were:

1. Helps in completing tasks on time.
2. Based on work plan the ANMs travel plan/ field movements can be planned.
3. Services can be better utilised by the community if they are aware of the ANMs field movement plan.
4. Based on the plan can prepare list of beneficiaries and field setting accordingly.
5. Work plan submitted to supervisors helps them in better monitoring and follow up along with work load assessment with each ANM.

A detailed analysis of the ANMs sample work plans has been already discussed earlier in Section 5 of this Chapter. The present Section presents data generated through in-depth interviews and the FGD with ANMs focusing upon work planning.

One of the major aspects which significantly impacts work planning and accomplishing tasks is village health plan or subcentre plan. In Srikakulam, it was found to be helpful in various ways like 1) Completing records. 2) Doing referrals. 3) Guiding field level activities like health camps and community outreach. 4) Enhancing coverage and thus meeting the targets. An **ANM from Srikakulam** clearly shared *'Health plan helps in covering the whole village. It also helps in finishing medical camps as per the schedule'*. Similarly, another **ANM from Srikakulam** mentioned *'Health plan enables to keep all the medical set up for ANM with checks'*.

In Chittoor, ANMs shared that village health plan or subcentre plan was helpful in overall work planning and thus effective time management. An **ANM from Chittoor** shared *'It (village health plan) defines what work needs to be done and doing specific work in specific time'*. An **ANM from Chittoor** accepted that *'It (village health plan) helps in following a timetable and gives good result'*. In Khammam, as shared by ANMs, village health plan or sub-centre plan helped them mainly in work planning and enhancing coverage. Another ANM from Chittoor shared *'It enables to find the villages which they have to visit and fulfil the tasks. It also helps in discharging duties at the SC level'*. An ANM from Chittoor expressed *'Plan helps us in knowing the number of ANCs in the villages and helps in treating them by doing priority house visits'*. Another ANM from Chittoor shared that *'Plan also helps in organising meetings at the village level and thus doing the work more easily'*.

It is worth noting here that ANMs lay a lot of emphasis on the existing work plan formats which in reality are tour plan for field visits. ANMs feel they manage to achieve a lot by following these and it appears some ANMs have found their own ways of incorporating micro planning for priority beneficiaries and imparting services using the existing plans.

The following facilitative factors that helped in the follow up of the work plan were identified through the TAM study 1) Supportive supervision comprising of problem solving by supervisors. 2) Support in accomplishing work tasks. 3) Support from Co workers like AWW and ASHA. Prior mobilisation by them can really save the ANM's time. 4) Community support received from village groups, leaders, youths, SHGs, village elders and the community at large. 5) Presence of MPHW-M whose support is important in terms of carrying heavy vaccine kits to the field, providing transportation for ANMs travelling to difficult locations, sharing of work tasks like records maintenance etc.

However, as was observed and shared by the ANMs, following the work plan was certainly not easy. There were various challenges which were a mix of interpersonal, community and health system related factors. The FGD with ANMs in the successive month (December 2015) in turn gave rise to responses which endorsed the findings that had emerged as a result of the analysis of the ANMs interviews. Table 16 summarises the challenges faced by ANMs in following the work plan.

Difficult transportation had emerged as a common challenge, to work planning across ANMs. A key issue was because of no/less modes of transport it was difficult for ANMs to reach the field site on time. By the time they reached the site there was barely enough time left for the actual service delivery component.

Meetings were found to be a common challenge in Srikakulam and Khammam in terms of following the work plan. There were reported instances when ANMs were called for sudden unannounced meetings or at times meetings stretched for long hours which impacted their day's functioning and the work plan. During the FGD, the ANMs shared that there were a few other administrative requirements and events (like trainings, reporting etc.) apart from meetings which consumed much of the ANM's time and impacted her routine plan for the day. They said *'At times teams from the state/district seniors ask for reports and records on urgent basis, sometimes not even with a day's notice, which leads us to stop all other activities and complete the report work.'*

Lack of community support was enlisted as a challenge by ANMs from Srikakulam, Chittoor and Khammam (FGD). It added to extra time being spent by the ANMs in motivation, persuasion and awareness building. As observed, there was reluctance among communities especially those from the tribal cluster of Srikakulam because of their own indigenous beliefs related to health and healing. During one of the field interactions the tribal community members told the data collection team *'We are unable to come to the SC as it is very far for us and we have our agriculture work to be done. We have a local person who treats us when sick and he is very effective. He charges less money too.'*

Likewise, large targets mismatched with both population numbers and health status were found to be a challenge in work planning by ANMs of Chittoor and Khammam (other factors). An ANM from Chittoor mentioned *'They face challenges in reaching the targets because when there is any TB patient then they have to treat them mandatorily for six months. Big challenge is to motivate them and make them take the medicines to get cured'*. Heavy load of records in terms of multiple registers and many a times duplicated information was a challenge as perceived by ANMs from Khammam which prevented them from implementing their work plan.

In the category of top five there were a few other challenges as identified in the three districts. While Srikakulam ANMs found emergencies in terms of work calls and outbreaks a challenge, accompanying beneficiaries to health facilities and lack of adequate Co workers support were found to be major impediments to work planning by Chittoor ANMs. In the situation of vacant positions and existing work load, mandatory accompanying of beneficiaries, especially women with high risk delivery cases, to the health facility consumed much more of the ANMs time and impacted the overall plan for the day and the week as the day's work was postponed to the next day. The situation was worrisome especially for health facilities where there were vacant positions because in the absence of the only ANM there was no one else to cater to the health needs of the community.

In Khammam, ANMs found the allocation of other tasks apart from the main ANM jobs for e.g. exam duty, additional charges in terms of deputation, outpatient duty at the PHC etc., as major impediments to work planning. During the FGD in Khammam, the ANMs shared that vacant positions cause added work burden upon a single ANM leading to an inability to complete activities on time.

It is clearly evident from the Table below that following the work plan by FLHWs vis-à-vis ANMs involves a crucial interplay of factors at the inter-personal/community level and health system level.

Table 16: Challenges faced by ANMs in work planning

SRIKAKULAM		CHITTOOR		KHAMMAM	
Item	Smith's S	Item	Smith's S	Item	Smith's S
1. HEALTH SYSTEM RELATED FACTORS					
Meetings	0.439	Accompanying beneficiaries	0.256	Other tasks	0.328
Emergencies	0.295	Difficult transportation	0.231	Meetings	0.178
Difficult transportation	0.136			Records maintenance	0.256
Epidemics/ outbreaks	0.053	Targets	0.154	Additional charges	0.133
				Difficult transportation	0.178
1 a) OTHERS					
Work planning,		Vacant positions,		Targets,	
Medical camps,		Epidemics/outbreaks,		Online MCTS tracking,	
Meetings,		Meetings,		Epidemics/outbreaks ,	
Stocks supply,		Carrying heavy vaccine kits,		Trainings,	
Multiple health programmes		Follow ups		Carrying heavy vaccine kits	
2. INTERPERSONAL FACTORS AND COMMUNITY RELATED					
Community support	0.091	Co workers support	0.115	None	
		Lack of community support	0.115		
2 a) OTHERS					
None		None		Community support,	
				Worker motivation	
3. OTHERS					
Climate		Strikes		None	
REFERENCE TO PHRASES USED					
<ul style="list-style-type: none">Work planning: Implies the context of manner in which ATPs are planned and implemented in the field by ANMsMedical camps: Have been found to be a challenge by ANMs in Srikakulam because it took up a lot of their time, because of their long duration. Communities residing up in the hills were not really coming to the health facility located in the plains but people did turn up for the camps in large numbersAdditional charges: ANMs in Khammam expressed that sometimes they have to look after the outpatient clinic at the PHC or they were deputed to other SCs which in turn impacted the priorities and work plan in their area.					

- **Stocks supply:** ANMs expressed that because of the medicines supplies not being available on time it was difficult to execute service delivery functions as per the plan. Beneficiaries did not get the supply which needed to be compensated for at a later stage when stocks were available
- **Carrying heavy vaccine kits** emerged as a challenge in work planning for the reason that they had to be collected from the PHC on Immunisation Day (which may involve waiting time too), carrying the same to the field and depositing the kits back on the same day. This left the ANMs with very little time available for the actual delivery of the service which often involved multitasking with other field level requirements at the facility or in the field
- **Meetings** emerged as a challenge because of their sudden unannounced nature and long duration hampering the ANM's work plan for the day
- **Strikes** caused a complete shutdown including health facilities. Strikes by workers also impacted work planning. Khammam was one such case where because of a statewide ASHA strike health service delivery was largely impacted and as shared, ANMs were found to be over-burdened
- **Follow ups** impacted the work plan due to the beneficiaries not attending the health services because of labour jobs or seasonal work in the agricultural field
- **Lack of community support** impacted the work plan because the ANMs had to put in a lot of effort into making the community accept health services and come to the facility. It has been difficult to convince drop outs to benefit from the health services provided at the SC and PHC

The ANMs were also asked to share any additional charges allocated to them. Six of the 43 ANMs across the three districts shared that they held additional charges apart from their core charge as 1st or 2nd ANM. Upon further analysis, the data revealed that in Srikakulam, one of the 13 ANMs held additional charge while in Chittoor three of the 15 ANMs and in Khammam two of the 15 ANMs held additional charge.

8. RECORDING

A fact that emerged through TAM observations and in-depth interviews with ANMs was that recording was one of the key tasks which kept ANMs considerably occupied. They had to maintain various kinds of reports and records.

ANMs across the districts maintained various kinds of registers, which was revealed in the interviews.

1. Service register related to maternal health with records like ANC, PNC, high risk delivery and expected date of delivery (EDD) record	9. Birth record register
2. MF2 (Malaria Fever) register	10. Death record register
3. IUD and oral pills records	11. Tuberculosis (TB) records
4. Outpatient records	12. Stocks register
5. Registers related with child health like immunisation records	13. Well chlorination records
6. Family planning records	14. Vitamin A register
7. Eligible couple records	15. Minor ailments records
8. Daily tour diary	16. Vaccine indent book
	17. Medical camps record
	18. Maarpu register

There are also certain reports which are to be submitted on a weekly and monthly basis. A few of the reports, in newer formats, are shared from the cluster level to be filled and shared on an urgent basis. This poses a challenge to the ANMs for two reasons: new formats with no clarity on how to fill them and the urgency of sharing them. It was observed that especially before cluster, sector and review meetings, ANMs spent most of their day in maintaining registers and reports required in the meetings.

ANMs were also asked to share the challenges they face in maintaining the records and suggestions to address those challenges. A detailed narration of the same has been captured through photo story on records maintenance.

One of the main challenges in filling up of these registers was beneficiary cooperation. For example an ANM from Srikakulam shared,

It is very difficult to trace the beneficiaries recorded in the register. Filling up of follow-ups in high risk register is a challenge. Oral pills are often left unused.

An ANM from Chittoor mentioned,

Filling up ANC records is challenging as women are unable to tell their last menstruation date. Moreover, they are not willing to leave homes for checkups etc. corresponding to specific entries in the record.

The ANMs also brought forth an important aspect related with the multiplicity of recording columns with repetitions. An ANM from Srikakulam stated, 'Challenge is to write the large number of records'. An ANM from Khammam echoed the same lines, 'There are large number of columns in the registers filling of which is a challenge.' The ANMs shared that there were more than 63 columns in the registers they filled which certainly needs to be reduced. In Khammam, a fact that emerged was that the reports and records were in English and ANMs find it difficult to comprehend them.

During interviews, ANMs shared some key suggestions with respect to addressing the challenges faced while maintaining records:

- 1) Limiting the number of records and reducing the columns to be filled –an ANM from Khammam said '*It will be better if they design one record in an online format*'. Upon being asked about the need for an online format, the ANM further added '*it will not only reduce time utilised in maintaining records but also help in easy identification whenever required*'.
- 2) Devising computerised recordings–An ANM from Chittoor mentioned 'Tabs, computer and online system for entering data should be made available'.
- 3) Building up village community awareness in order to seek their cooperation.
- 4) The ANMs from Chittoor specially expressed the need for training in filling up the various formats given to them.

9. SUPERVISION

Across studies (Hernandez A.R et. al. 2014^{xi}, Hill Z et.al. 2014^{xii}, Kok M and Muula A 2013^{xiii}) it has been clearly observed that supervision is a critical institutional intervention and a range of strategies can greatly influence performance, motivation, and retention of health workers. As noted by Hill Z et.al. (2014), *'Effective and regular supervision could potentially help to meet the challenges unique to community health workers (CHWs), especially in the context of task-shifting initiatives that transfer tasks from formal health workers to CHWs. Supervision could help focus CHW efforts and identify and correct poor practices.'*

Through interviews the inquiry was made at two levels: support expected and support received in actual from the supervisors. The FGD with ANMs helped to better understand the significance of supervision to the ANMs.

9.1 Significance of supervision to ANMs

The ANMs strongly emphasised the need of supervision for their better functioning. As per ANMs the following were key aspects in which ANMs found a supervisor's support significant to them. 1) Proper implementation of activities. 2) Problem solving at the community level. 3) Clarity of communication in terms of on time information about meetings and programmes. 4) Accomplishing work tasks and sharing existing work load. 5) On the job training. 6) Facilitative role as a bridge between ANMs and seniors.

9.2 Support expected from the supervisors

Providing supportive supervision to ANMs emerged as a common expectation, among the top five, from the supervisors across the three districts (Table 17). *Supportive supervision (SS) as a strategy ensures that personnel carry out their activities effectively through direct, personal contact on a regular basis; this would guide and support peripheral functionaries to develop professional competence.* ^{xiv} If done periodically in a right fashion supportive supervision can greatly impact quality of performance by FLHWs (Roemer MI, Montoya-Aguilar C 1988).^{xiv}

Need for supportive supervision was uniformly articulated across all three districts in terms of help to be extended in needful situations, periodic field visits, during special activities like medical camps, special days like immunisation and School Health Day etc. An ANM from Srikakulam mentioned 'There is a need for supervisors to attend the SC once a week'. Adding to the aspect shared above, an ANM from Chittoor said 'They need to explain unknown things'. An ANM in Khammam expressed 'I need the support of supervisor when I am visiting interior areas'. This ANM finds it difficult to travel alone to far off areas.

The ANMs in Srikakulam and Chittoor expected that supervisors should help them out in providing a regular supply of medicines and other stock material with quick processing of the requisition made for stocks supply. ANMs also expressed that supervisors must train them in terms of the technical components of their routine work. In Srikakulam and Khammam, ANMs expected the supervisors to help them out in accomplishing work tasks which becomes even more crucial in the situation of vacant positions.

However, there were a few other district specific expectations from the supervisors in the category of the top five. In Srikakulam, ANMs expressed that supervisors should be approachable which would help them to interact with them better. In Chittoor, ANMs specifically expected that supervisors must motivate and encourage them and support them in providing transportation, travel along with them which would in turn help them in performing better. In Khammam, the ANMs asked for supervisory support in three key aspects: providing overall guidance including problem solving, clearly communicating information on time and carrying vaccines since ANMs have to first come to the PHC to collect the kits and then go to

remote locations for immunisation, which does consume a lot of their time. An ANM from Khammam shared ‘They should explain everything in detail and they should guide in solving the problems that arise while doing their tasks.’

Thus, one can infer that though some of the expectations, as expressed by ANMs, are difficult to fulfil (for e.g. accompanying the ANM in far interior areas every time she visits, supervisors bringing vaccines to all SCs in their supervisory area) but a basic impetus has to be laid on ‘supportive supervision’. The supervisor may be required to motivate the ANMs and solve apprehensions and constraints in travelling alone to far off areas.

Table 17: Support expected from the supervisors by ANMs*

*Terms used in the Table have been described above with context specificity

SRIKAKULAM		CHITTOOR		KHAMMAM	
Item	Smith’s S	Item	Smith’s S	Item	Smith’s S
Stocks supply	0.179	Supportive supervision	0.857	Guidance	0.500
Supportive supervision	0.167	Motivation	0.143	Accomplishing work tasks	0.286
Training	0.154	Transportation	0.143	Supportive supervision	0.196
Accomplishing work tasks	0.154	Training	0.095	Clear communication	0.179
Approachability	0.154	Stocks supply	0.048	Carrying vaccines	0.054
OTHER FACTORS					
Problem solving, Knowledge clarity, Meetings, Guidance, Workers availability, Motivation		None		Stocks supply	

9.3 Support received in actual from the supervisors

It can be seen from Table 18 given below; supportive supervision and accomplishing work tasks emerged as two overlapping items across the three districts in terms of actual support received from the supervisors.

Supportive supervision should be seen in the light of the results presented above wherein a few of the ANMs expressed the same as support expected. In actual support received, supportive supervision emerged in the context of help provided by supervisors in needful situations like motivating the village community and linking up with PRI members for aspects such as family planning, village sanitation etc. An ANM from Srikakulam expressed, ‘Her supervisor visits with her in the field every ten days which is very helpful’. Likewise, another ANM from Chittoor

shared, *'I receive good support from the supervisors at the field and SC level'*. ANMs across clearly reiterated the fact that supervisors provided support in village level field visits. Thus, it is important to focus upon the vitality of supportive supervision provided to ANMs which could be further improved in terms of existing levels and ways through which supportive supervision is provided to ANMs.

The ANMs had also expressed that their supervisors help them in accomplishing work tasks like when they are on leave, when the workload is excessive like on special days etc. An ANM from Chittoor clearly articulated *'My supervisor helps me in referring some cases to hospital and in school health programme'*. Similarly, an ANM from Khammam mentioned *'If I take leave then supervisor takes over my work during the leave period.'*

ANMs from Srikakulam and Khammam, expressed that they periodically receive overall guidance from their supervisors which at times was also related to a mix of their personal and professional aspects and addressing of doubts. Supervisors in Srikakulam and Chittoor helped the ANMs in terms of maintaining the large number of records and formats they have. ANMs from Chittoor and Khammam shared about receiving periodic on time communication from supervisors either in person or through the phone.

In general the helpful nature of supervisors, providing regular stocks supply and support in problem solving, emerged as areas of support in Srikakulam, Chittoor and Khammam respectively.

Table 18: Support received in actual from the supervisors

SRIKAKULAM		CHITTOOR		KHAMMAM	
Item	Smith's S	Item	Smith's S	Item	Smith's S
Supportive supervision	0.292	Supportive supervision	0.500	Accomplishing work tasks	0.586
Accomplishing work tasks	0.250	Accomplishing work tasks	0.346	Guidance	0.286
Guidance	0.167	Records maintenance	0.115	Supportive supervision	0.221
Records maintenance	0.083	Stocks supply	0.038	Clear communication	0.143
		Clear communication	0.077	Problem solving	0.143
OTHER FACTORS					
Dealing with patients, Stocks supply, Conducting meetings		Conducting meetings		None	

10. MEETINGS

A maximum number of ANMs across the three districts attended ASHA and sector meetings every month. Among other top five meetings attended, officials meetings were mentioned by ANMs from Srikakulam and Chittoor while village level meetings were mentioned by ANMs from Chittoor and Khammam. Other meetings mentioned are shown in the Table below. It emerged through in-depth interviews that meetings did pose a challenge to ANMs work planning and overall management of time mainly because of their sudden unannounced nature and long duration.

Frequency enumeration for the meetings (first five in descending order of frequencies) has been presented below in Table 19.

Table 19: Meetings attended by ANMs in a month

SRIKAKULAM		CHITTOOR		KHAMMAM	
Item	Frequency	Item	Frequency	Item	Frequency
ASHA meetings	12	ASHA meetings	15	ASHA meetings	13
Sector meetings	07	Sector meetings	15	Sector meetings	12
Cluster meetings	06	Convergence meetings	8	Staff meetings	12
Review meetings	04	Officials meetings	4	Village level meetings	07
Officials meetings*	02	Village level meetings	3	Emergency meetings	03
*Collector, SPHO, Mandal development officer, member of Legislative Council					
OTHER MEETINGS					
Inter-department (with ITDA officials),		Cluster meetings,		Cluster meetings	
Emergency and special meetings (on special days)		Staff meetings,			
		Awareness building meetings,			
		Emergency meetings			

11. PHYSICAL HEALTH OF ANMs AND WORK

One of the rationales of the TAM study was to understand the impact of the work environment on the physical health of FLHWs, ASHAs and AWWs. Thus, each one of them was asked about any existing health condition they had and ways in which it impacts their work performance both at the facility and field level.

The impact of physical health on daily functioning was one of the crucial aspects as observed by the field data collection team and shared by ANMs during interviews as well as FGDs. The ANMs from the FGD group mentioned '*At times we are sick. Field visits in hot afternoons during those times are difficult. Functioning from health facility is comparatively easier*'.

During an interview, ANMs from **Srikakulam** spoke about a range of ailments they suffer from like appendicitis, back pain, asthma, vision related and general ailments like fever and body pains etc. One of the ANMs spoke about her pregnancy and the consequent challenges she faces in doing ANM work (Case Story of Pregnant ANM). As a woman, the dual challenge of work because of pregnancy was clearly recognised by ANMs during the FGD as well. The ANMs unanimously expressed,

For ANM taking care of her special physical needs during pregnancy and accomplishing work tasks is very challenging. A pregnant ANM does require a co workers support in significant ways. If she has to climb up the hill at times she might find it difficult and in such cases the presence of a Co workers is of great importance. During such times, the supervisor should give the ANM more of record work and activities which she can perform by being at the health facility alone. Another staff member can look after field level activities. Presence of MPHW-M as a helping hand becomes very relevant under such circumstances. Pregnant ANM requires leave with wage payment.

The narrative presented above sheds light on very significant aspects related with the physical condition of a woman and her work responsibilities as an ANM who is in turn the basic foundation stone of the health service delivery to women, children and the community at large. The narrative states how the health service system at large and its institutions can be of support to a pregnant ANM. However, an important concern was expressed by ANMs which also emerged through field level observations. Contractual ANMs (often 2nd ANM hired under NRHM) are not eligible for two months of paid maternity leave. Getting leave can also be challenging and depends largely upon the discretion of the MO. Nevertheless, an interesting case of a mix of factors like co workers support during pregnancy, proactive nature of institutions (human resource i.e. MO and supervisors, flexibility provided by institution to the ANM Temporary recruitment of supportive ANM to pregnant ANM by the trust in Chittoor) and work division with task shifting based on the practical situation was demonstrated in one of sample PHCs of TAM in Chittoor (PHC TV Palli in P.Kothakota non tribal cluster). This PHC was run under the PPP model by Rajanna Trust.

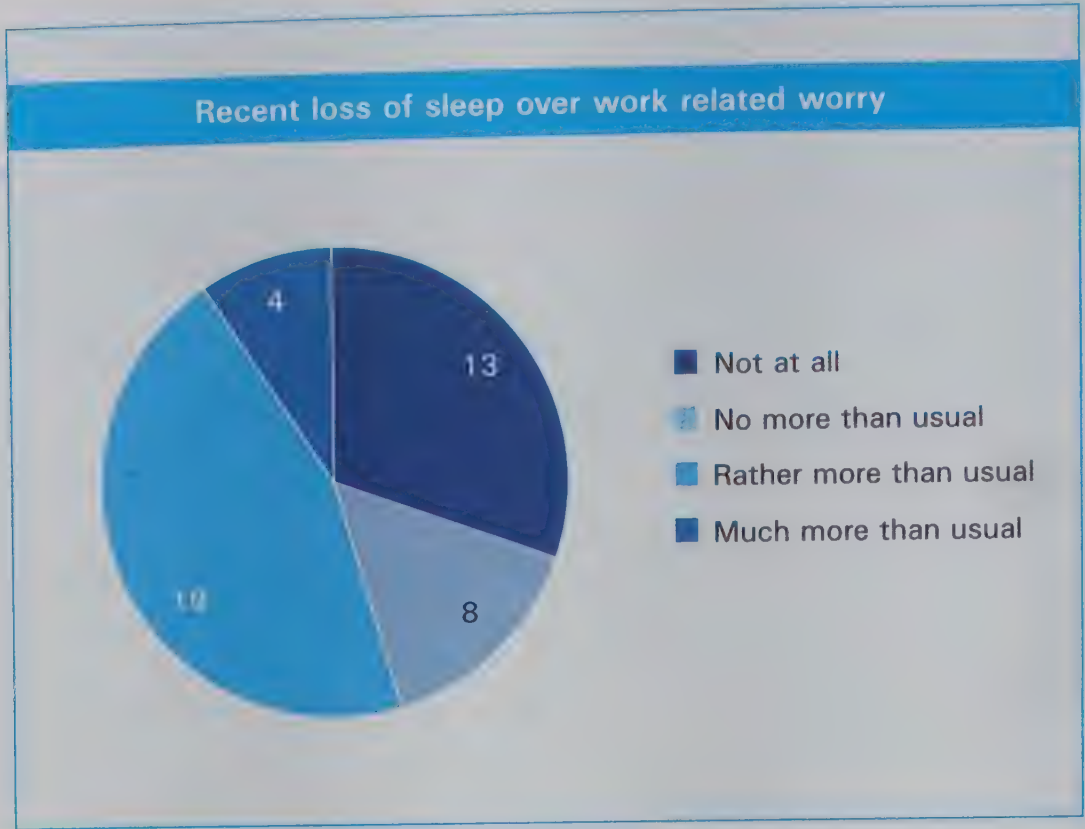
In **Chittoor and Khammam**, a few of the ANMs spoke about suffering from thyroid disorder, sinus, low blood pressure, back pain etc. Otherwise no other substantial sharing was made by ANMs with reference to any health conditions they may have had.

Given the strenuous nature of the ANMs work, especially during field days which also involves miles of walking at times, their physical condition does impact their work in a variety of ways. It becomes a perpetual state of illness for many of them while still trying to accomplish their routine work as ANMs. An **ANM from Srikakulam** spoke about the extreme tiredness she experiences because of her appendicitis operation and inability to walk much. She is serving in a remote hilly tribal area of the PHC and given her physiological condition, working in such a terrain becomes a daunting task. Vision related problems impact the ANMs when out in the field especially during hot sunny days. An **ANM from Chittoor** mentioned that '*because of chronic back pain I am unable to sit for longer time and during long field visits*'.

ANMs were also asked about their wellness related aspects through close ended questions with response to be given on a Likert scale. A five item general health questionnaire was used for the purpose. Five key aspects were probed through the questions devised 1) Recent loss of sleep because of work related worry. 2) Recent experience of being constantly under strain. 3) Ability to enjoy normal day to day activities. 4) Recent experience of feeling unhappy and depressed. 5) Impact of present status of health on functioning at the facility and field level.

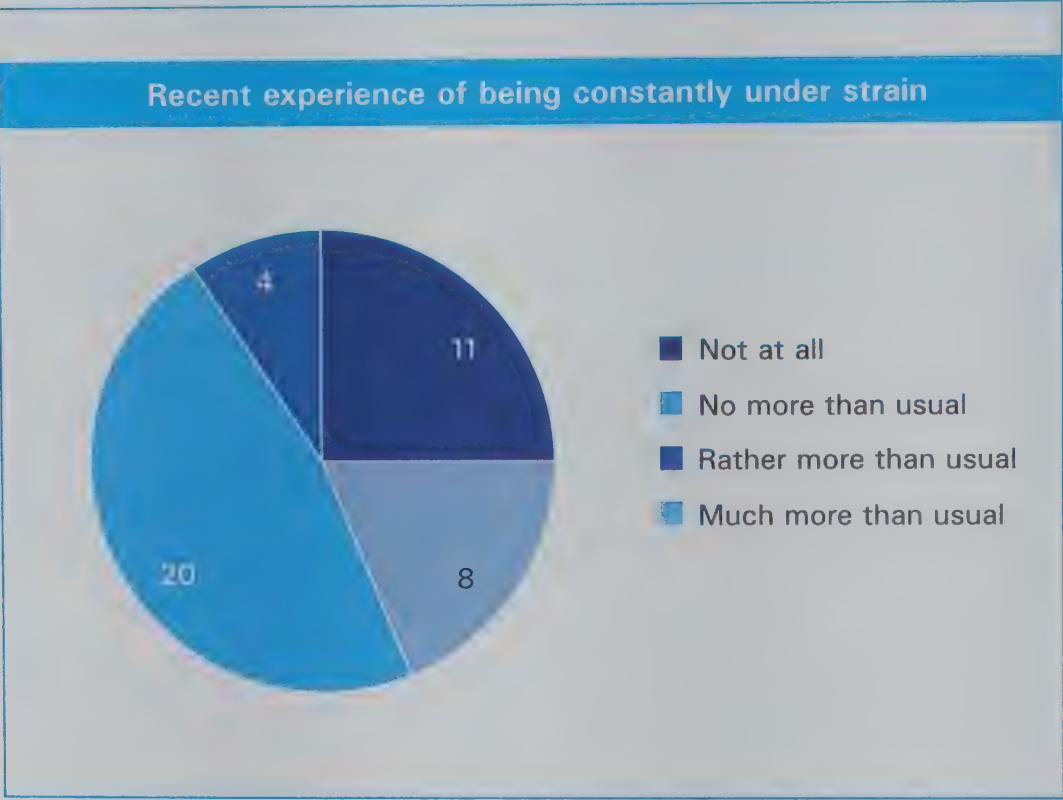
Forty three ANMs across all districts were asked about the impact of work stress on their sleep patterns (Figure 11). While 30 per cent of ANMs reported that they had no sleep loss; 41.9 per cent of ANMs reported to have had rather more than their usual loss of sleep over worry.

Figure 11: Recent loss of sleep because of work related worry



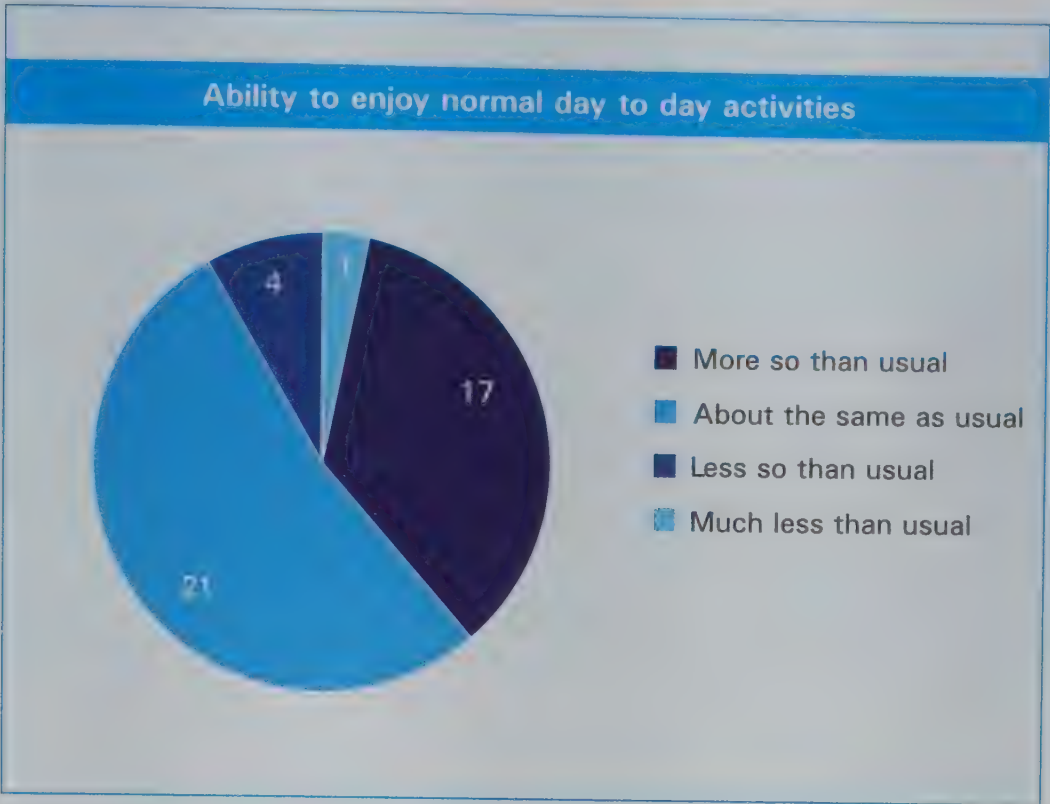
ANMs were asked to share any recent experience of being constantly under strain because this may directly or indirectly impact their functioning at work (Figure 12). While 25.6 per cent of ANMs said they had no experience of strain; 46.5 per cent ANMs said they had experienced rather more than their usual.

Figure 12: Recent experience of being constantly under strain



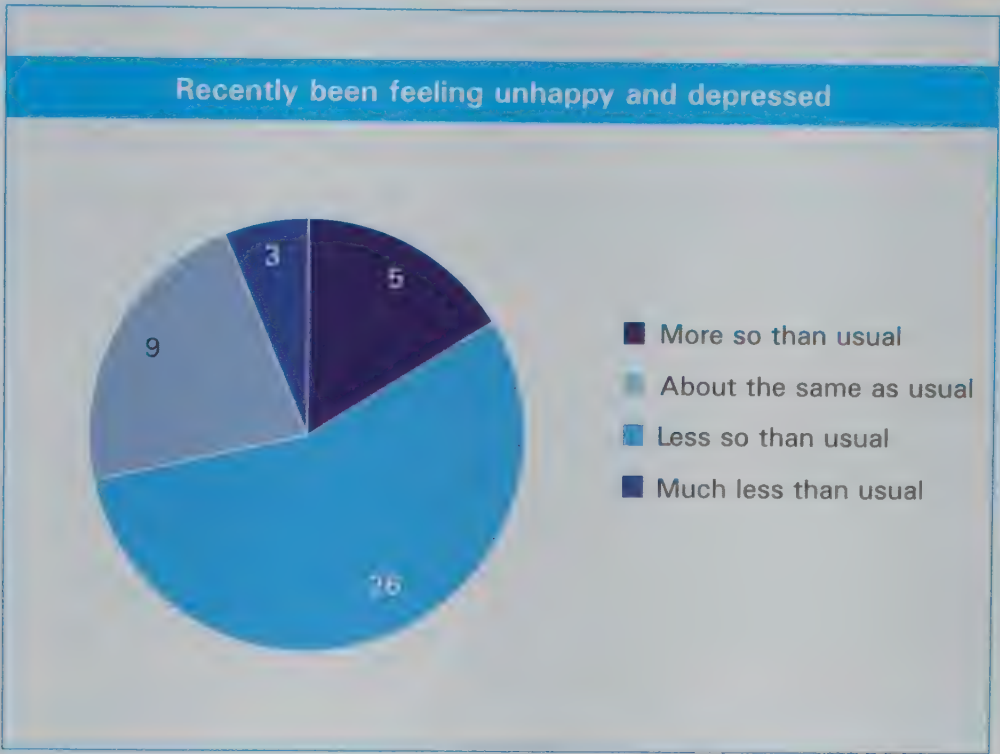
An individual's ability to enjoy normal day to day activities in turn greatly impacts his/her ability to perform tasks during the day. Thus, as revealed through data, while 39.5 per cent ANMs accepted that they were able to enjoy their day more than normal; 48.8 per cent ANMs experienced the same as usual with no major changes (Figure 13).

Figure 13: Ability to enjoy normal day to day activities



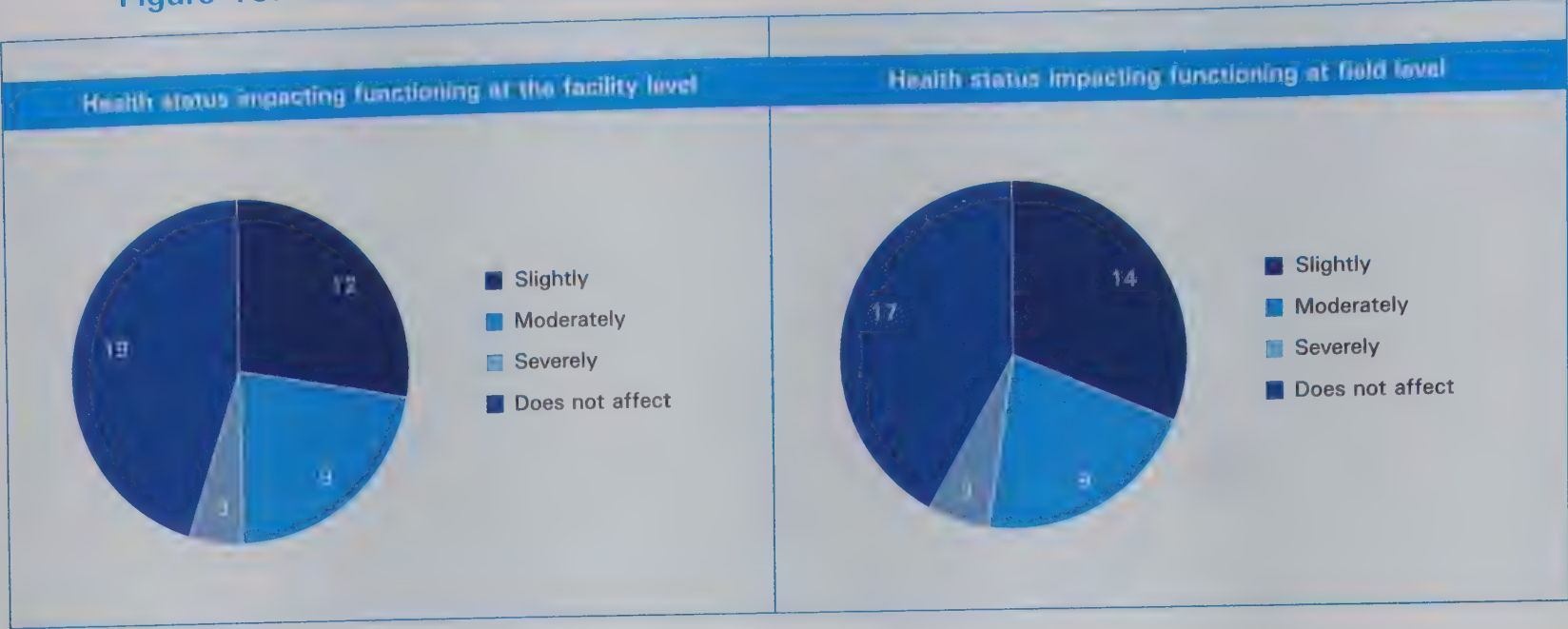
60.5 per cent of ANMs experienced about the same as usual in terms of recent experience of feeling unhappy and depressed (Figure 14).

Figure 14: Recent experience of feeling unhappy and depressed



The status of a co workers health does impact his/her functioning at the facility and field level so ANMs were asked to share the same (Figure 15). While 44.2 per cent ANMs at the facility level reported that their health status had no impact on functioning; 27.9 per cent ANMs reported that it had a slight impact on work functioning. Of the ANMs 4.7 per cent (02) said that it severely impacted their work functioning. At the field level, 39.5 per cent ANMs reported health status had no impact on functioning; 32.6 per cent ANMs expressed that it had a slight impact on their work functioning. Three ANMs (7%) reported about the severe impact ill health had on their work functioning at the field level.

Figure 15: Health status impacting functioning of ANMs at facility and field level



12. TRAININGS

Trainings are an important aspect which impact ANM functioning not only through an enhanced knowledge base but also through technical skill base gained. ANMs were asked about various domain areas in which they want to be trained in order to perform their daily activities effectively and in the quickest possible time (Table 19).

Training need for communicable diseases (e.g. HIV, Leprosy, and Tuberculosis) identification and testing commonly emerged across the three districts among the first five needed training areas in descending order of frequency. ANMs from Srikakulam and Khammam Districts asked to be trained in Emergency medical obstetric care (EmOC) in order to conduct deliveries in times of emergency. This gains even more importance in the tribal cluster PHCs like the one in Srikakulam which had not only remote but also highly inaccessible locations. As shared with the data collection team during one of the field interactions, an ANM from the tribal cluster PHC of Srikakulam mentioned,

We need to be trained in EmOC as it is very important for our kind of locations where tribal habitations, located up in the hills, are very scattered with no pukka road. 108 services cannot reach those locations. PHC is not functional 24x7. Under such conditions if adequate facilities are available at the SC and we are trained in handling emergency normal delivery cases then a lot of time is saved.

In Chittoor and Khammam, ANMs asked to be trained in online MCTS tracking in order to be able to update their records online by themselves. ANMs from Chittoor said that in spite of the training they faced difficulties in handling tablets which had been newly introduced for MCTS tracking. In TS State, MCTS tracking was done based on manual entries in computers from the records maintained unlike in AP. ANMs in Khammam expressed the challenge faced in online tracking at two levels: data entry from forms into the computer and generation of analysis from the data. In such situations they either pay from their pockets to get entries done from internet cafes or in certain situations the supervisors or other co workers help them out.

ANMs from Srikakulam and Chittoor expressed a need to be trained in the domain of maternal health, specially related with the identification of high risk cases, haemoglobin testing for ANC women etc.

There were few district specific training needs in the first five frequency enumeration (descending order). ANMs from Srikakulam wanted to be trained in the area of adolescent health and immunisation. ANMs from Chittoor expressed a need to be trained in haemoglobin and diabetes testing. The ANMs articulated that they found the ANC checkup of women a challenge because they found haemoglobin testing difficult.

The ANMs from Khammam expressed that the new health programmes should be explained to them properly, both theoretically and practically. They also asked to be better trained in terms of maintaining various records and formats given from the district.

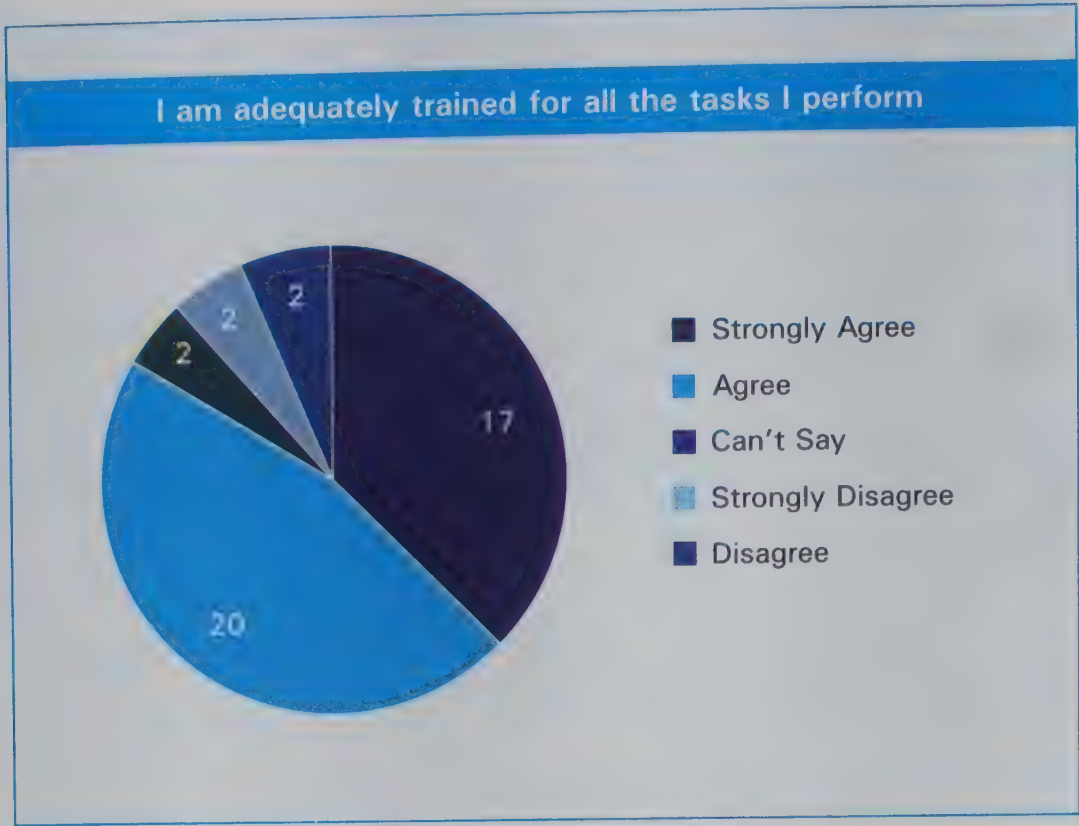
Table 19: Training areas expressed by ANMs

SRIKAKULAM		CHITTOOR		KHAMMAM	
Item	Frequency	Item	Frequency	Item	Frequency
Communicable diseases	05	Haemoglobin testing	04	New health programmes	04
Maternal and child health	03	Online MCTS tracking	04	Records maintenance	04
Immunisation	02	Communicable diseases	03	Online MCTS tracking	03
Adolescent health	02	Maternal health	02	Communicable diseases	02
EmOC	01	Diabetes testing	01	EmOC	02
OTHER AREAS					
Online MCTS tracking, Work planning, Dealing with outbreaks Records maintenance Soft skills for dealing with the people and motivating them.		EmOC , Immunisation, Work planning		Communicable diseases, Refresher trainings, Computer training	

However, when through close ended questions ANMs were asked about adequate training for the tasks they perform, 86 per cent of ANMs agreed (strongly agree and agree) that they were adequately trained while only 9.3 per cent ANMs disagreed and said they were not well trained (Figure 16). Further analysis from data revealed that in **Srikakulam**, nine of 13 ANMs agreed that they were trained well enough to perform the tasks. In **Chittoor**, all 15 ANMs agreed that they were well trained and in **Khammam**, 13 of 15 ANMs agreed that they were adequately trained. Out of these 43 ANMs, only 32.6 per cent (14 ANMs) ANMs had received computer training while the rest 62.8 per cent (27 ANMs) were operating without any computer training.

These findings are in complete contrast with the ANMs expressed need of training areas across the districts. Thus, though ANMs may feel that they are adequately trained yet when asked for a list of training areas they do share significant areas where training needs to be provided.

Figure 16: ANMs and trainings



13. SCHEMES AND POLICIES OF THE GOVERNMENT FROM HEALTH DEPARTMENT IMPLEMENTED IN THE DISTRICT

During the interview ANMs were asked about the various schemes and policies implemented by the health departments of the AP and TS Governments. The ANMs from Srikakulam and Chittoor Districts shared a range of schemes and policies being implemented such as 1) Janani Suraksha Yojna xvii (JSY) 2) Incentives given for family planning operations (For vasectomy: Rs.150/- is given) 3) Bangaru Talli xviii 4) 104 service (Availability of drugs and medicines under 104 services -PHC Mobile Fixed Day Health Services; FDHS) 5) 108 Ambulance service xix 6) Janani Shishu Suraksha Karyakram (JSSK)1 and 7) Free medicines to TB patients (Directly Observed Treatment Short-course; DOTS)ii 8) NTR Arogya Sewa/Vaidya Seva/Arogyashri iii.

In Khammam District, the schemes and policies which were being implemented were found to be similar to those in the districts in AP. Additionally, there were two more schemes *Kalyana Lakshmi* iii and *Shaadi Mubarak* iv schemes which were being implemented in the TS State and the district.

14. SUGGESTIONS GIVEN BY ANMs TO IMPROVE WORK PERFORMANCE

One of the main objectives of the TAM study was to offer recommendations to policymakers/ administrators and relevant stakeholders for effective utilisation of time by FLHWs, AWW and ASHA. Keeping this in view, participants were asked to give some suggestions in order to improve their work performance (Table 20).

Improving transportation in order to be able to travel easily within the field was one of the most commonly given suggestions across the three districts (in first five frequency enumeration). In Srikakulam and Khammam, the ANMs suggested that periodic trainings should be conducted based on various training areas, as listed above, involving both lectures and field component.

Improving infrastructure in terms of maintenance and providing the same through government owned buildings with space and furniture emerged as a suggestion given by a maximum number of ANMs from Chittoor and Khammam.

There were a few district specific suggestions as well in the first five frequency enumerations (descending order). In Srikakulam, ANMs recommended that work planning should be more robust and supervisors must mandatorily check availability and implementation of the same. Support from the community should be improved in terms of better awareness and strengthened rapport in order to improve service delivery along with total time utilised. ANMs also suggested that posting of ANMs should not be in SCs very far from their houses because it involved a lot of home-to-centre-to-home travel. An **ANM from Srikakulam** mentioned the aspect of travel mobility and expressed '*I need help in travelling to hilltops and during rains*'. Through TAM observations and interviews, it was clear, that much of the travelling time which ANMs spend in the field was to cover areas with no or limited options to travel.

ANMs from Chittoor suggested that stocks supply should be regular and complete, motivation of workers should be improved through encouragement given by supervisors and other seniors, and MPHW-M should be recruited as his presence not only helps in sharing tasks but also in dealing with some of the community level issues better. **ANM Chittoor** clearly asked, '*We need motivation and encouragement through seniors like MOs and supervisors.*'

Table 20: Suggestions given by ANMs to improve work performance

SRIKAKULAM		CHITTOOR		KHAMMAM	
Item	Frequency	Item	Frequency	Item	Frequency
Trainings	02	Infrastructure strengthening	03	Infrastructure strengthening	08
Work planning	02	Improved transportation	03	Training	05
Enhanced community support	01	Stocks supply	02	Transportation	03
		Motivation	02	Co workers support	02
Transportation	01	Recruitment of MPHW-M	01	Regularisation of 2nd ANMs	02
OTHER SUGGESTIONS					
Undertaking daily field visits, MPHW-M presence, Records verification, Building understanding about technical components related with maternal health like Hb estimation in ANC care, Infrastructure strengthening, Motivating workers		Maintaining definite schedule of meetings and trainings timings, Periodic refresher and on job trainings, Payment of salaries on time, Reducing political involvement, Community support, Online MCTS tracking, Interpersonal through enhanced co workers support		Enhanced community support, Stocks supply, Payment of salaries on time, Clean work atmosphere, Filling up vacant positions	

5B. MPHWM

I. SOCIO-DEMOGRAPHIC INFORMATION

1. AGE GROUP

Out of six MPHWMs covered under the TAM study, only one worker was below 25 years of age while the remaining five were in their 30s.

2. EDUCATION LEVEL

The education level of the MPHWMs is presented in Table 21. Only four out of six, who were from Srikakulam District, had received computer training. Three of the MPHWMs in Srikakulam had finished the training course between 2007 and 2014. Among the remaining two, one finished the course in 1994 while the other completed it in 2001.

Table 21: Education level of MPHWM

Education level*	Number of MPHWM (M)
Graduation	05
Post-graduation	01
* One MPHWM from Satyavedu SC of Dasukuppam PHC (non-tribal PHC) in Chittoor District had also completed a course for Sanitary Inspector.	

3. FAMILY TYPE AND MARITAL STATUS

Five of the workers were married while one was unmarried. Out of six, only one lived in a joint family.

4. PLACE OF RESIDENCE AND MODE OF TRANSPORT

As there was no provision for MPHWM staying in the SC quarters all of them were staying in locations away from the SC. Five of the workers from Srikakulam District had their own two wheeler which they used to reach the SC and field areas while the MPHWM from Chittoor used public transport (mostly bus) to travel to the PHC and by auto rickshaws or walked to villages which were further. The MPHWMs with vehicles reported that at times they also helped the ANMs of the SC in travelling to and from villages.

II. TIME UTILISATION BY MPHWM WITH FACILITATING FACTORS AND BARRIERS TO TIME MANAGEMENT

A total of six MPHWMs, four from the tribal cluster PHC of Srikakulam and one each from the non-tribal cluster PHCs of Srikakulam and Chittoor, were observed for a span of six days each (Monday to Saturday). In total 33 MPHWM days were observed. Observations during the observation week were missed only for one MPHWM from Srikakulam who was then observed in the following week on the same days.

The detailed findings that emerged through the TAM observations are presented below for the MPHWS-M cadre across the days of the week. Distinction between tribal and non tribal clusters MPHWS-M has not been done because of a smaller sample size. Time is represented through range, median with interquartile range and average total time per week per MPHWS-M.

1. AVERAGE TOTAL TIME SPENT ON JOB AND TRAVEL

MPHWS-M spent median 7:55 hours (IQR, 5:48 – 9:47) home to home in a day during the 35 observation days. They spent about three hours on travel on any day. Travel from home to workplace and back to home took median 1:51 hours (IQR, 0:52-2:42) and within the field travel took median 1.16 hours (IQR, 0:48-1:41) in a day. Thus, MPHWS-M spent only median 5:44 hours (IQR, 4:07-6:57) on the job and excluding within field travel they spent only median 4:16 hours (IQR, 2:21-5:37) on actual work (Figure 17 and 18).

As observed all MPHWS-M were staying in locations away from the SC and that explains long travel time from home. Five of the MPHWS-M had their own two wheeler which was used to reach the SC and field areas while the MPHWS-M from Chittoor used public transport (mostly bus) to travel to the PHC and by auto rickshaws or walked. The MPHWS-M with vehicles reported that at times they also helped the ANMs of the SC in travelling to and from villages. Because of the ease of transportation MPHWS-M took the lead in travelling to remote locations and habitations especially in the tribal cluster PHCs of Srikakulam (Photo story on health services delivery by MPHWS-M). As four of the six MPHWS-M worked in tribal areas it explains the longer within field travel times.

2. TIME SPENT IN A WEEK ON VARIOUS CATEGORIES AND SUB-CATEGORIES OF ACTIVITIES

Tables 22 and 23 below show the time spent in the various broad and sub categories of activities by MPHWS-M in total and across weekdays. Activities have been identified as programmatic activities, programme supportive and ‘others’. The MPHWS-M lunch breaks were not well defined and were often clubbed with field or centre level activities, or personal work, thus they have not been mentioned separately.

Programmatic activities: MPHWS-M spent median 996 minutes on the programmatic component of activities and average time of 855 minutes in a week (minimum 583 minutes and maximum 1778 minutes), which is about 56 per cent of the average time spent on job in a week. During the week days higher median time was spent on direct service delivery on Friday (90 minutes) followed by Tuesday (80 minutes). Records and reports maintenance was mostly done on Monday (median, 70 minutes) while on other days median time spent was zero minutes to 12 minutes only. MPHWS-M travelled to the field every day with maximum travel noted on Friday followed by Tuesday.

Direct service to beneficiary: Based on the job description of MPHWS-M and actual field experience an observation schema was devised which observed time utilisation of MPHWS-M across subcategories like communicable diseases, non-communicable diseases, seasonal diseases, school health, UID, camp work, home visits, IEC etc. (Table 23).

As revealed through data, home visits, UID and school health consumed the maximum time of MPHWS-M during the observation week. MPHWS-M spent median 126 minutes during home visits which is almost half of their time spent on service delivery. Four of six MPHWS-M were from the tribal cluster PHC of Srikakulam (04) and as observed and reported by ANMs, because of remote inaccessible locations, hilly terrain and scattered tribal habitations, MPHWS-M took the lead in visiting distant locations in the field. Thus, they had a higher time spent on travel within the field and imparting services via home visits.

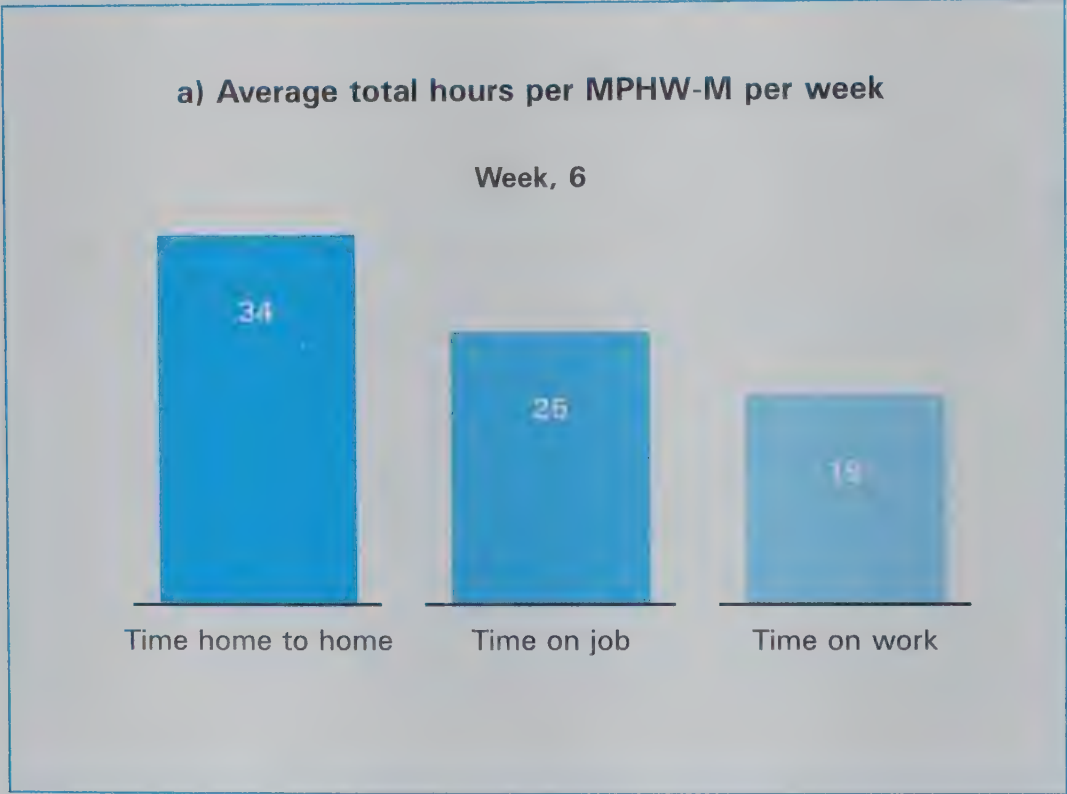
Universal Immunisation Day and school health were other key areas where the MPHWS-M supported ANMs by carrying vaccine kits to the health facility, immunisation, and health checkups of school children and other activities. Median 31 minutes in a week were spent in control of seasonal diseases/epidemics. It mainly involved the detection of suspected cases of malaria and slide preparation for the same.

Records and reports: One MPHWS-M each reported maintaining three additional kinds of records i.e. supervisory visits/tour visits records, annual village health plan and administrative record. Maintaining registers and computer data entry took up a lot of their time. Median 57 minutes were spent in maintaining registers. Observers documented that, MPHWS-M maintained registers mainly related to Malaria and fever. Only two MPHWS-M were doing any kind of data entry and it was observed that MPHWS-M supported ANMs largely in updating online records and data entry.

Programmatic support activities: On programmatic support activities MPHWS-M spent median 297 minutes and average 312 minutes per week (minimum 233 minutes and maximum 572 minutes) which is about 23 per cent of average time spent on the job in a week. As seen in Table 1, MPHWS-M spent much of their time in meetings/discussions with Co workers or the village community and with seniors. However, as observed by the data collection team much of this time was actually spent in the name of community discussions or talks with other Co workers rather than formal useful meetings. Officials suggested in their interviews that this time could certainly be reduced provided the MPHWS-M are put to constructive tasks with a defined work plan and follow up.

Other work: Much of the MPHWS-M time was spent in the category of 'others' (median 364 min). An average of 350 minutes was recorded per week (minimum of 315 minutes and maximum 588 minutes) which is about 23 per cent of average time spent on job in a week. MPHWS-M spent a lot of time on personal work and other uncategorised work and observers felt that this time could be utilised in providing services to beneficiaries.

Figure 17: Time spent by MPHWS-M from home to home, on job and on designated work in hours



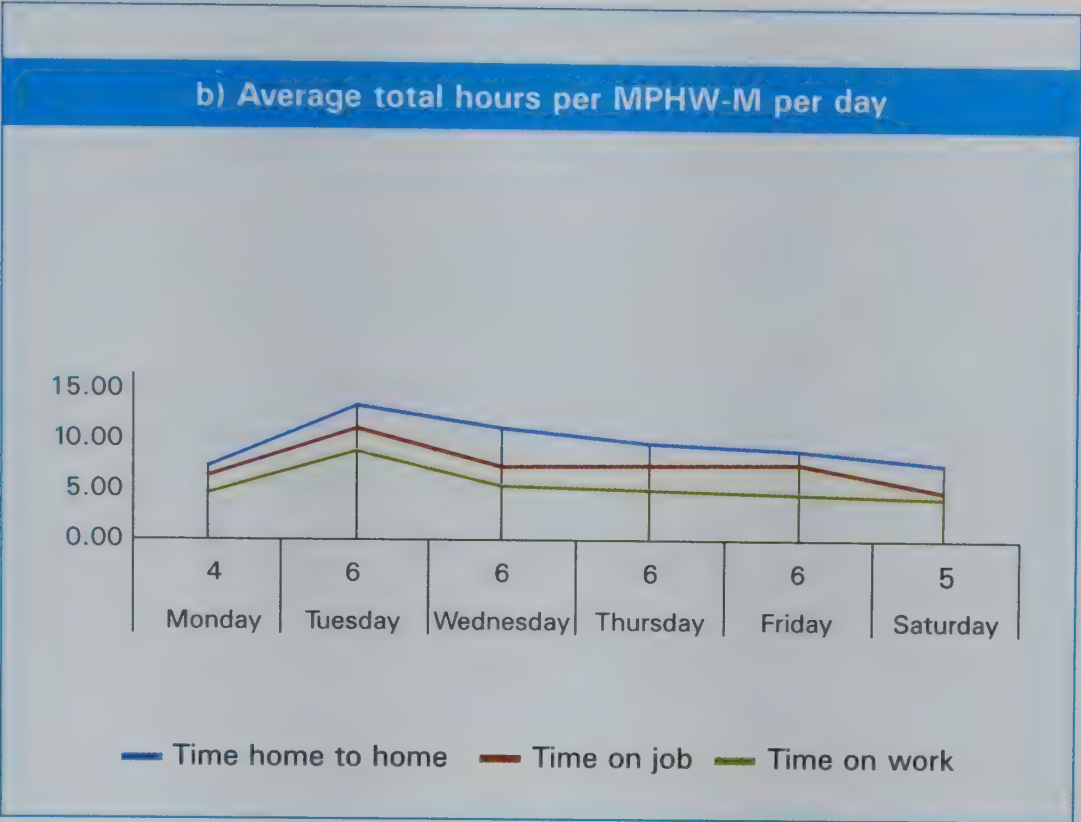


Figure 18: Number of MPHWMs and total time spent with respect to category and sub-category of activities

MPHWM

Activities in categories and sub categories

Number of MPHWMs-M working during the week and respective days; max bar height is 6

Total time spent by MPHWMs-M during the week and respective days; max column height for week column is 86 hours; for days it is 24 hours

MPHWM spent median 7:55 hours (IQR, 5:48 – 9:47) home to home in a day during the 35 observation days. They spent about three hours on travel on any day. They spent only median 4:16 hours (IQR, 2:21-5:37) on actual work.

MPHWMs-M spent about 56% of their total on job time on programmatic activities in a week, 21% on programme support activities and 23% on other activities.

Within programmatic direct service delivery was more on Thursdays and Fridays while records maintenance was more on Mondays and Wednesdays.

MPHWMs-M were involved more in home visits, seasonal diseases, school health and universal immunisation however very little time was spent for seasonal disease/epidemic outbreak and school health.

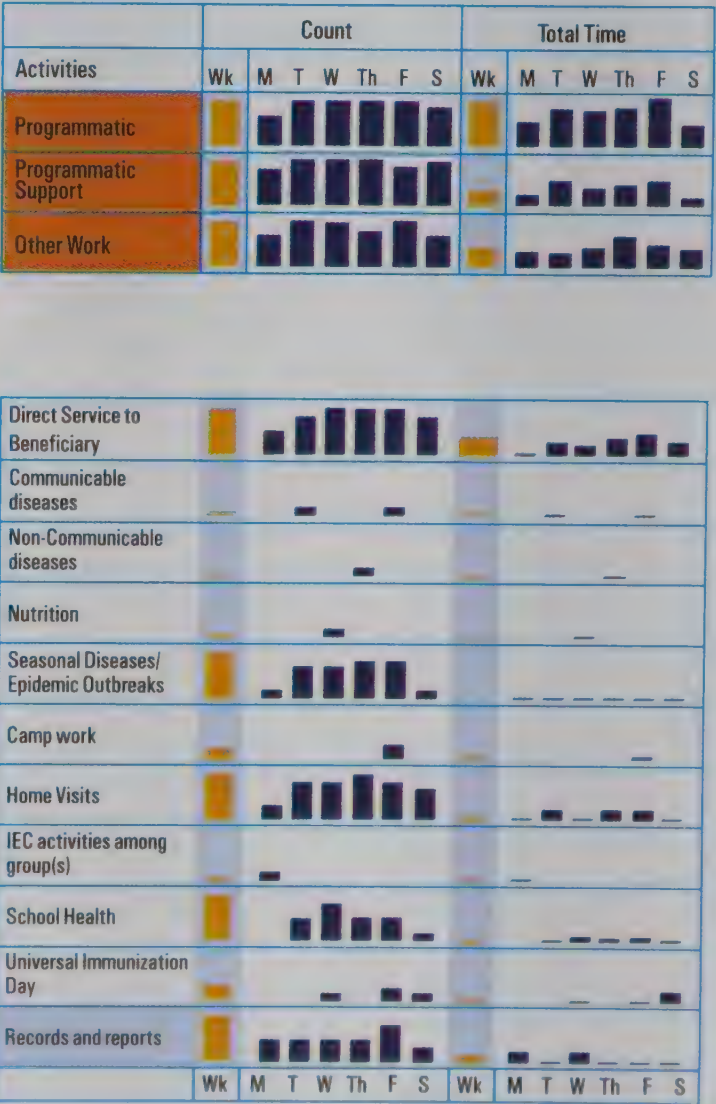


Table 22: Activities under broad categories as performed by MPHWs-M across the six days of the week, N = 06 (in minutes)

The Table gives the number of MPHWs-M performing the respective activity on respective day of the week

Particulars	Total/week N = 6					Monday N = 4		Tuesday N = 6		Wednesday N = 6		Thursday N = 6		Friday N = 6		Saturday N = 5	
	Count	Min	Max	Median	Total / week / MPHw-M	Count	Median	Count	Median	Count	Median	Count	Median	Count	Median	Count	Median
Programmatic (sub-total)	6	583	1778	996	855	4	160	6	226	6	129	6	148	6	244	5	31
Direct services to beneficiary	6	258	897	294	350	3	14	5	80	6	39	6	71	6	90	5	17
Records and reports		35	394	64	141	3	70	3	6	3	12	3	4	5	10	2	0
Travel to and within field	6	268	638	393	363	4	75	5	95	6	65	6	72	6	119	5	10
Programmatic support (sub-total)	6	233	572	297	312	4	63	6	71	6	77	6	54	6	62	5	26
Trainings	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

Meetings/ Discussions with co workers or village community	6	162	291	192	176	4	20	6	67	5	42	4	14	5	44	5	14
Meetings/ Discussions with seniors	6	6	215	90	82	3	5	2	0	4	9	2	0	3	7	2	0
Non-health but work related other activities	2	0	65	0	37	0	0	0	0	0	0	1	0	0	0	1	0
Administrative work	6	7	90	60	41	2	8	4	5	3	5	6	8	5	4	4	12
Other work	6	315	588	364	350	4	61	6	37	6	47	5	65	6	66	4	95
Waiting	6	7	155	53	65	1	0	3	10	6	19	2	0	3	8	2	0
Miscellaneous: Personal work	6	16	302	199	168	3	55	6	14	6	7	4	57	5	52	3	12
Others/ Uncategorised	6	27	290	134	117	3	6	2	0	1	0	4	31	3	7	4	81
On job Total	6	1404	2714	1591	1516	4	322	6	338	6	396	6	350	6	374	5	179
Travel home to centre / field and return to home	6	171	1075	537	551	4	49	6	126	6	165	6	155	6	86	5	63
Grand Total (home to home)	6	1762	3753	2464	2068	4	352	6	464	6	556	6	505	6	428	5	211

Table 23: Subcategories of programmatic activities performed by MPHWs-Macross the days of the week, N = 06 (in minutes)

Particulars	Total/week N = 6						Monday N = 4		Tuesday N = 6		Wednesday N = 6		Thursday N = 6		Friday N = 6		Saturday N = 5	
	Count	Min	Max	Median	Total / week / MPHW-M	Count	Count	Median	Count	Median	Count	Median	Count	Median	Count	Median	Count	Median
Direct services to beneficiary	6	258	897	294	350	3	14	5	80	6	39	71	6	90	5	17		
Communicable diseases (TB, HIV, Leprosy etc)	2	0	8	0	5	0	0	1	0	0	0	0	0	0	0	0		
Non-communicable diseases	1	0	3	0	3	0	0	0	0	0	0	1	0	0	0	0		
Nutrition	1	0	12	0	12	0	0	0	0	1	0	0	0	0	0	0		
Seasonal diseases/Epidemic outbreaks (like fever, cold, dysentery etc.)	6	8	70	31	30	1	0	4	19	4	6	5	3	8	1	0		
Camp work	2	0	38	0	19	0	0	0	0	0	0	0	2	0	0	0		
Home visits	6	117	476	126	170	2	11	5	51	5	8	36	5	10	4	17		
IEC activities among group(s)	1	0	3	0	3	1	0	0	0	0	0	0	0	0	0	0		
School health	6	30	200	65	68	0	0	3	5	5	13	15	3	15	1	0		

Universal Immunisation Day	3	0	370	26	143	0	0	0	0	0	0	1	0	0	0	2	0	1	0
Records and reports	6	35	394	64	141	3	70	3	6	3	12	3	4	5	10	2	0	2	0
Administrative record	1	0	10	0	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual village health plan preparation and submission	1	0	25	0	25	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Beneficiary records	3	0	33	0	14	1	0	1	0	0	0	0	0	2	0	0	0	0	0
Computer data entry	2	0	87	0	68	1	0	0	0	1	0	0	0	0	0	0	0	0	0
Registers	4	0	160	57	100	1	0	1	0	3	12	2	0	2	0	1	0	0	0
Supervisory visits/ tour visits records	1	0	14	0	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	5	0	160	27	44	1	0	2	0	2	0	2	0	3	1	1	0	0	0
Travel to and within field	6	268	638	393	363	4	75	5	95	6	65	6	72	6	119	5	10	0	0

3. MPHWS-M ADVANCE TOUR PLANS (ATPs) AND WORK PLANNING

All six MPHWS-M reported that they had a monthly action plan. Five of them shared that they had received feedback for their plan from their supervisors while one said he had not received any such feedback. Five of them expressed that they were always able to follow their work plan. Except for one, all five MPHWS-M reported the availability of a village health plan or sub-centre plan or micro plan with them.

Moreover, sample work plans of the participant MPHWS-M, received from Srikakulam’s tribal cluster PHC were minutely studied. Like the ANMs work plan, the work plan here too comprised of date wise village coverage details only. However, no detailed activity plan in terms of day and duration was mentioned (Figure 19).

Figure 19: MPHWS-M work plan from the tribal PHC of Srikakulam

36		places	
Date	Day		
16-07-2015		Narayanaguda	
		Pelamguda	
		Elammaniguda	
17-07-2015		Goidi	
		Pattikaguda	
18-07-2015		Kittalapadu	
		Sowda Goidi	
20-07-2015		Vala	
		Turuvadu	
21-07-2015		Manda colony	
		Raimaniguda	
22-07-2015		Manda	
		Devariguda	
		Narayana guda	
23-07-2015		Rasulpeta	
		Kondapalli	
24-07-2015		Kuddapalli	
		Kopudamanga	
25-07-2015		Valagajji	
		Valagajjiguda	
27-07-2015		Amma chervu	
		Peligenuni	
28-07-2015		S Goidi	
		Kittalapadu	
29-07-2015		Goidi	
		Pattikagude	

4. DAILY WORK FUNCTIONING

4.1 Facilitative factors for MPHWS-M in accomplishing daily work tasks

Through interviews with MPHWS-M, five key factors were identified as facilitative to their functioning (Table 24). These were 1) Co workers support. 2) Community support. 3) Balanced work, clear division of tasks. 4) Smooth transportation and ease of travel in plains. 5) Health facility location.

It emerged that the most important perceived facilitative factor for MPHWS-M smoothly carrying out their daily tasks at work was the support received from co workers (Smith’s S 0.667). The MPHWS-M, Srikakulam shared ‘I receive support from ASHAs. Coordination with ANMs greatly helps in doing the work easily’. The MPHWS-M, from Srikakulam shared ‘MO and supervisors decide the work perfectly which helps in my planning and doing tasks’.

Table 24: Facilitative factors for MPHWS-M

Item	Smith’s S
1. INTERPERSONAL FACTORS AND COMMUNITY RELATED	
Co workers support	0.667
Community support	0.472
2. HEALTH SYSTEM RELATED FACTORS	
Work division	0.167
Transportation	0.083
Health facility location	0.167
3. OTHER FACTORS	
Local affiliation with the community, Regular meetings, Routine follows ups, Media support	
REFERENCE TO PHRASES USED	

- Co workers support signifies support received from other 1st and 2nd ANMs, AWWs, ASHAs, health supervisors and MOs
- Community support received through women's groups, PRIs, beneficiaries, community youth etc
- **Work division:** implies clear division of work between ANMs and MPHWS-M so that no duplication occurs and there is maximum coverage. For example, ANMs and the MPHWS-M posted in the SCs of Srikakulam's tribal cluster PHC. Since there was an epidemic the areas were clearly demarcated and divided among existing workers in order to provide services to the maximum number of people from the community
- **Transportation:** In contrast to the ANMs, MPHWS-M largely expressed transportation to be a facilitative factor because five of six MPHWS-M had their own two wheeler. This made overall travel and in particular field level travel much easier for them
- **Health facility location:** MPHWS-M shared that their residences were much closer to the health facility (PHC/SC) which did save their home to health/facility/field to home travel time. Also during emergencies it was much easier to be present at short notice
- **Local affiliation with the community** did give mileage to MPHWS-M in rapport building, understanding the dialect and overall service delivery. Two of the MPHWS-M in Srikakulam were from the tribal community in which they served
- **Regular meetings** did help MPHWS-M in planning their work as per the set priorities and also present challenges faced by them in the work
- **Routine follow ups:** enabled MPHWS-M in being updated about the health status of the communities in which they served. If they noticed a case that required an ANMs attention they brought it to her notice
- **Media support** was acknowledged by MPHWS-M because of health and hygiene related messages circulated by local dailies

4.1.1 MPHWS-M work environment and job satisfaction

While four MPHWS-M expressed to be satisfied with their jobs; one of them was highly satisfied. When this was seen in the context of the work environment's conditions, four MPHWS-M agreed that their work conditions/environment was healthy and comfortable while two were not able to comment.

4.2 Challenges for MPHWS-M in accomplishing daily work tasks

Factors which were challenges to MPHWS-M were identified through interviews (Table 25). These were 1) Transportation 2) Community support 3) Climate 4) Meetings 5) Locally spoken language.

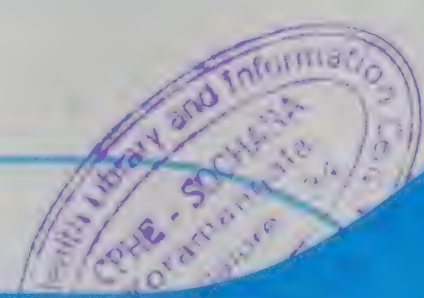
Transportation (Smith's S 0.300) emerged as the most important challenge for MPHWS-M especially for those who were serving in remote hilly terrain. The lack of community support and awareness (Smith's S 0.300) emerged as the second major challenge to MPHWS-M work. One MPHWS-M from Srikakulam shared '*People's priority to their daily job work is more than health aspects so it is difficult to generate awareness among them*'. Climate was expressed as a challenge mainly by an MPHWS-M from Srikakulam on account of excessive rain and difficult geographical terrain. This certainly impacts their operations during rainy weather and makes it difficult to reach tribal habitations which are remote and located up in the hills. With reference to deputations, MPHWS-M from Srikakulam mentioned '*Every time my posting is changed to other centres on deputation, it makes it difficult for me to function consistently*'.



Table 25: Challenges faced by MPH-W-M in smoothly carrying out daily tasks

Item	Smith's S
1. HEALTH SYSTEM RELATED FACTORS	
Transportation	0.300
Meetings	0.200
1. a) OTHERS	
Deputations	
2. INTERPERSONAL FACTORS AND COMMUNITY RELATED	
Community support	0.300
Locally spoken language	0.133
3. OTHER FACTORS	
Climate	0.267
REFERENCE TO PHRASES USED	
<ul style="list-style-type: none">• Transportation: was expressed as a challenge in terms of travel in hilly inaccessible terrain and scattered tribal habitations. There were no roads to the habitations up in hill and thus the only mode of transport was to walk through narrow muddy paths which were even more challenging during the rains• Meetings: posed a challenge because of their sudden, often unannounced nature, and long duration which in turn impacted regular tasks planned for the day• Community support: MPH-Ws-M shared during interviews that communities in which they served were largely inhabited by tribals (from non-tribal PHC of Srikakulam community was populated by fisherman). They had their own indigenous health related beliefs, culture and practices. For them coming down hill to the health facility was not worth it and they had more faith on the local healer within the community. One MPH-W-M from one SC of Srikakulam's tribal PHC shared that once while accompanying an ANM to a habitation up in the hills he was beaten up just because he tried explaining the benefits of coming to the SC/PHC. Another MPH-W-M shared that in spite of efforts to generate awareness about the benefits of institutional delivery, the community still prefers home deliveries and only when the case becomes serious is the woman brought down in <i>lifters</i>• Locally spoken language was a challenge because the local community from the non tribal PHC of Srikakulam understood Oriya because of their proximity to the Orissa border. Likewise in the tribal cluster PHC of the district, the nontribal MPH-W-M found it difficult to communicate in Telugu because the community, largely tribal, understood a different dialect of Telugu• Climate: Excessive rains and hot sunny weather both posed challenges in the MPH-Ws-M functioning• Deputations: MPH-Ws-M sent on deputation was a challenge. They were sent to other SCs either because of vacant positions or staff being on long leave. Because of this the MPH-W-M not only had to multi-task but also had to divide his attention between two health facilities	

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4.3 Other aspects related with MPHw-M work

Only three MPHws-M had been given their job descriptions at the time of joining while two received it after joining. One reported to have had received an updated job description in the last three months. Only one MPHw-M had received any award/reward in the past, but none had received any in recent years.

5. TIME MANAGEMENT AND WORK PLANNING

5.1 Perceived roles and responsibilities of MPHw-M

The MPHws-M shared some key roles and responsibilities as perceived by them, 1) Accomplishing house visits and follow ups. 2) Communicable diseases identification and control. 3) Health and sanitation measures like chlorination of wells and water bodies, and spraying. 4) Awareness generation on issues like reproductive and sexual health among community men. 5) Tackling non-communicable diseases. 6) Health education. 7) School health. 8) Disease surveillance. 9) Conducting household surveys. 10) Curative care. 11) Supporting ANMs during special days (Photo story on service delivery by MPHw-M). It was observed that though theoretically MPHws-M were aware of what they are supposed to do in the field but pragmatically it seemed to be effectively restricted to a few selected activities only.

5.2 Factors facilitating effective management of time by MPHw-M

MPHws-M identified key factors which facilitate management of time (Table 26). These were 1) Co worker support. 2) Transportation. 3) Community support. 4) Locally spoken language. 5) Stocks supply. Periodic and on time stocks supply was one of the factors which was considered important by MPHws-M for the effective management of time. One MPHw-M from Srikakulam shared ‘A monthly supply of all drugs from the drug list is provided to us. This also helps in keeping a check on supply of medicines’.

Table 26: Factors which facilitate effective management of time by MPHw-M

Item	Smith's S
1. INTERPERSONAL FACTORS AND COMMUNITY RELATED	
Co workers support	0.500
Community support	0.250
Locally spoken language	0.111
2. HEALTH SYSTEM RELATED FACTORS	
Transportation	0.611
Stocks supply	0.111
2. a) OTHERS	
Family support, Health facility location	

REFERENCE TO PHRASES USED

- **Co workers support:** was mentioned in terms of support provided by ANMs, ASHAs, AWWs and Anganwadi helper, seniors like the MO and supervisors
- **Transportation:** Ease in travel because of own vehicle. Four of six MPHWS-M spoke about the convenience of travel because of their vehicle
- **Community support:** was received from the community, and leaders from the community in order to address issues of public health significance. Emphasis was laid upon community involvement
- **Stocks supply:** in terms of availability and regular supply of medicines, kits etc
- **Family support** was counted mainly in terms of support received from the spouse. MPHWS-M shared that at times they have to rush during odd hours to cater to the community’s need and insuch situations support received from the family was a great help
- **Health facility location:** The MPHWS-M from Chittoor was staying in the SC premises itself and thus it was much easier for him to deliver health services and cater to the village community needs even after work hours

5.3 Factors which pose a challenge in effective management of time by MPHWS-M

During an interview a MPHWS-M shared thefactors which pose a challenge in the effective management of time. Some key factors identified were (Table 27) 1) Climate 2) Terrain 3) Meetings 4) Transportation 5) Absenteeism.

In the interviews climate emerged as the most important perceived factor which impacted effective utilisation of time by MPHWS-M. This was an issue raised mainly by MPHWS-M serving in the remote hilly tribal terrain of Srikakulam’s tribal cluster PHC. Service delivery becomes even more challenging during the rainy season.

One MPHWS-M from Srikakulam shared a crucial aspect with reference to community support. He said ‘*Ignorance of tribal people and their own beliefs makes it difficult to implement awareness generation activities*’. The challenge comes because of friction between mainstream allopathic practice and indigenous tribal health beliefs and culture. One of the MPHWS-M also said that he had been beaten once because he went to treat a sick man with the allopathic medicines he was carrying. This certainly makes service delivery a daunting task in such habitations.

Table 27:Factors which pose a challenge in effective management of time by MPHWS-M

Item	Smith’s S
1. OTHER FACTORS	
Climate	0.583
Terrain	0.367
Lack of community support, Other tasks	

2. HEALTH SYSTEM RELATED FACTORS	
Meetings	0.233
Transportation	0.283
Absenteeism	0.200
REFERENCE TO PHRASES USED	
<ul style="list-style-type: none"> • Climate: Rainy season coupled with hilly terrain greatly impacted reaching the field sites and overall time utilised especially in travel • Meetings were found to be challenging in terms of their sudden unannounced nature and of long duration • Absenteeism from work also leads to the loss of man days of work and increases the overall load upon other workers • Other tasks like additional duties, deputations etc. impacted MPHWS-M existing plan and overall work load 	

5.4 Work planning by MPHWS-M

Interviews with MPHWS-M brought out a few factors which posed challenges in following the work plan (Table 28). These were 1) Meetings 2) Epidemics/Outbreaks 3) Seasonal works 4) Other tasks.

It emerged through data that meetings were the biggest challenge in following the work plan and thus constraining the MPHWS-M existing plans. One **MPHWS-M from Srikakulam** expressed *‘Emergency meetings with ITDA-Programme Officer, with PHC-MO etc. consumes a lot of time and pre-planned work schedule is also impacted’*. Sudden epidemics/outbreaks and related mass level preparations focus entirely towards curbing the outbreak and compromising other health priorities. Because of seasonal work related with agriculture the villagers remain unavailable, which also leads to missed beneficiaries and follow up at a later stage. Other tasks in the form of additional duties, deputations etc. impacted the execution of the regular plan and tasks during the day.

Table 28: Challenges in following up of work plan by MPHWS-M

Item	Smith’s S
1. HEALTH SYSTEM RELATED FACTORS	
Meetings	0.375
Other tasks	0.250
2. OTHER FACTORS	
Epidemics/outbreaks	0.250
Seasonal works	0.250

5.5 Work coordination with ANMs

In the TAM study’s field area, MPHWS-M worked in close coordination with ANMs at the village and SC level in order to better deliver health services (Photo story on worker coordination). In the process of delivering health services to the community there were certain activities for which both the cadre of workers came together. Interviews with MPHWS-M and field level observations made by the data collection team helped to understand this better except for one MPHWS-M the other five spoke about coordinating with ANMs in daily activities.

MPHWS-M from Chittoor shared that *‘Regular touch with 1st and 2nd ANMs for work needs to be there. They both have to travel to far off places and coordination certainly helps in doing better work’*. He clearly insisted on ANMs and MPHWS-M working together. Likewise, **MPHWS-M from Srikakulam** shared *‘Coordination with ANMs in different areas of maternal and child health like ANC, PNC, immunisation and seasonal diseases etc. helps in service delivery and better coverage.’*

It also emerged through the analysis of ANM interviews across districts that the presence of MPHWS-M is vital for field level functioning given the load of beneficiaries. The MPHWS-M presence and support is vital to ANMs even with respect to security when ANMs are in remote field locations. One **MPHWS-M from Srikakulam** shared *‘On special days like school health, immunisation and camp days, coordination between ANMs and MPHWS-M becomes even more vital’*. Another **MPHWS-M from Srikakulam** mentioned a very crucial practical aspect of work coordination. He said *‘ANMs are closely in touch with villagers and ASHAs. Coordination with ANMs helps in gathering information about the community and community’s problems.’*

6. RECORDING

MPHWS-M across the two districts shared about maintaining various kinds of records and registers as follows.

<div>1. Malaria disease related formats like M1 (general population survey), M2 (format filled and shared with lab technician), M7 (format report filled and shared by lab technician with the worker), M9 (detailed listing of village and household wise listing of positive malaria cases)</div> <div>2. Chlorination register</div> <div>3. Diarrhoea register</div>	<div>4. Stocks register</div> <div>5. Daily tour diary</div> <div>6. Patients diary</div> <div>7. Communicable diseases related register like for TB, leprosy</div> <div>8. Epidemic register</div> <div>9. Condom distribution register</div>
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MPHWS-M were also asked to share the challenges they face in maintaining the registers. One key challenge which emerged was the difficulty in filling up various records and registers. It was noticed that beneficiaries were often unable to give correct information like date of birth for filling up M1 register which led to incomplete information being filed by the MPHWS-M. Another challenge was filling up of technical information like composition of spray materials to be used to fill the chlorination register. It was also expressed that different formats, received from the health department, were to be filled related with malaria prevention and control and other health related aspects. At times there is no clarity in terms of how to fill up the formats and various formats only duplicate the information and consumes more time.

Key suggestions which MPHWS-M made in order to be better able to maintain records were 1) Giving clarity in filling up various kinds of records and formats given like giving information about composition of spray materials so that they were able to fill up the chlorination register. 2) Support from co workers like ASHAs in filling up of registers like M1 which is related to household and population. 3) Unique registration identification column (Aadhar card number) must be inserted in order to avoid duplication of beneficiary records.

7. SUPERVISION

7.1 Support expected from the Supervisors

MPHWS-M expressed that they had expectations from supervisors in the following aspects 1) Supportive supervision 2) Approachability 3) Cooperation 4) Guidance for records (Table 29).

Supportive supervision was the most important expectation as articulated by the MPHWS-M. A clear need for supervisors accompanying the MPHWS-M in the field was expressed. A significant aspect emphasising upon the approachability of supervisors emerged through interviews. MPHWS-M from Srikakulam shared *'Supervisors should be friendly in nature which will help in understanding and learning things better'*. Cooperation was sought from the supervisors in overall accomplishing of work and specific guidance in completing records.

Table 29: Support expected from the supervisors

Item	Smith's S
Supportive supervision	0.500
Approachability	0.200
Cooperation	0.200
Records	0.200

7.2 Support received in actual from the supervisors

MPHWS-M actually received support from their supervisors in various ways like 1) Cooperation 2) Work tasks 3) Stocks supply 4) Problem solving 5) Division of work among workers (Table 30).

Two of the MPHWS-M shared that their supervisors in general were cooperative with them. One MPHWS-M from Srikakulam expressed that the supervisors helped him in accomplishing his work tasks. Another MPHWS-M from Srikakulam said *'They guide about the work. Provide information about the meetings and alert us about emergencies'*. Supervisors also help in facilitating regular supply of medicines and other stock materials (Smith's S 0.250) as per the requirement. MPHWS-M from the non tribal cluster PHC of Srikakulam shared supervisory intervention in dealing with difficult cases and devising problem solving to him. He said *'Supervisor allocates work and staff as per the requirement.'*

Table 30: Support received in actual from the supervisors

Item	Smith's S
Cooperation	0.333
Accomplishing work tasks	0.333
Stocks supply	0.250
Problem solving	0.167
Work division	0.111

8. MEETINGS

MPHWs-M mentioned the range of meetings attended in a month 1) ASHA meeting 2) Cluster meeting 3) Sector meeting 4) Officials meeting 5) Inter-department meeting (Table 31).

Table 31: Meetings attended in a month by MPHWM

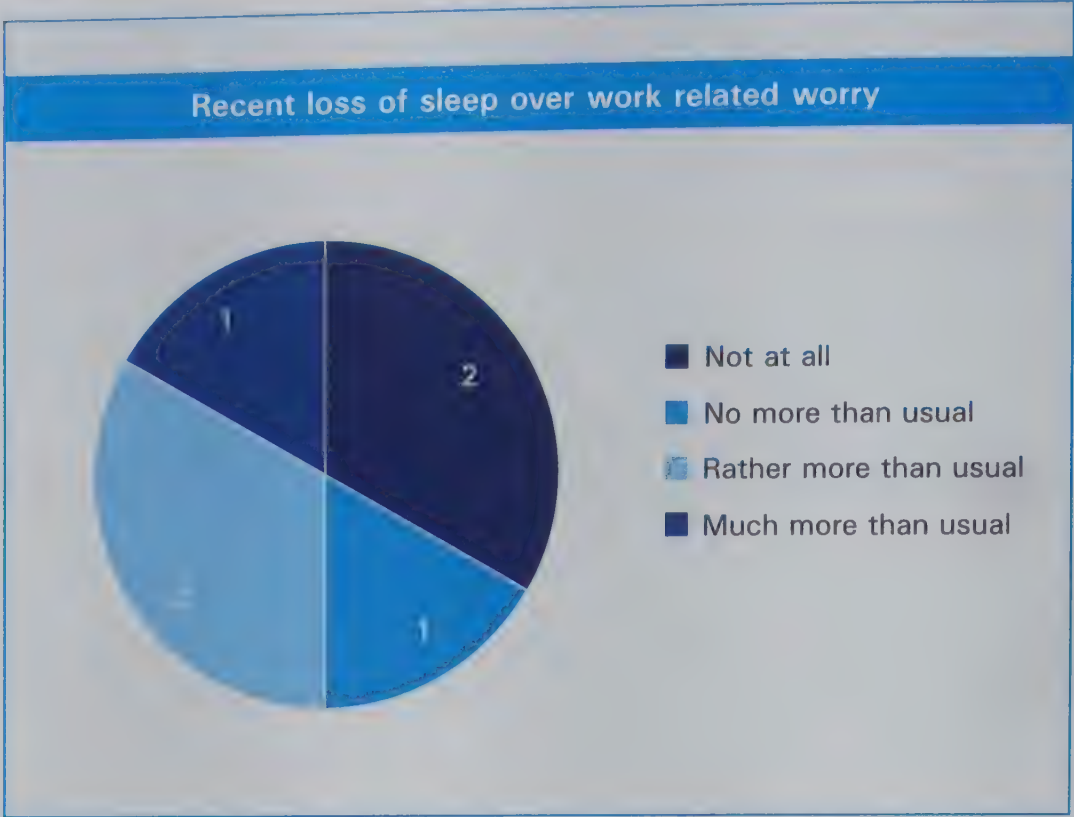
Item	Frequency N=06
ASHA meeting	05
Cluster meeting	03
Sector meeting	03
Officials meeting	01
Inter-department meeting	01
OTHER MEETINGS	
Emergency meeting	
Special meeting	
Convergence meeting	

9. PHYSICAL HEALTH OF MPHWM AND WORK

No substantial information emerged from MPHWM interviews in reference with the impact of their physiological condition upon their functioning. MPHWMs-M were also asked about their wellness related aspects through close ended questions with response to be given on a *Likert scale*. Like ANMs, they were asked about five key aspects related with health and wellness.

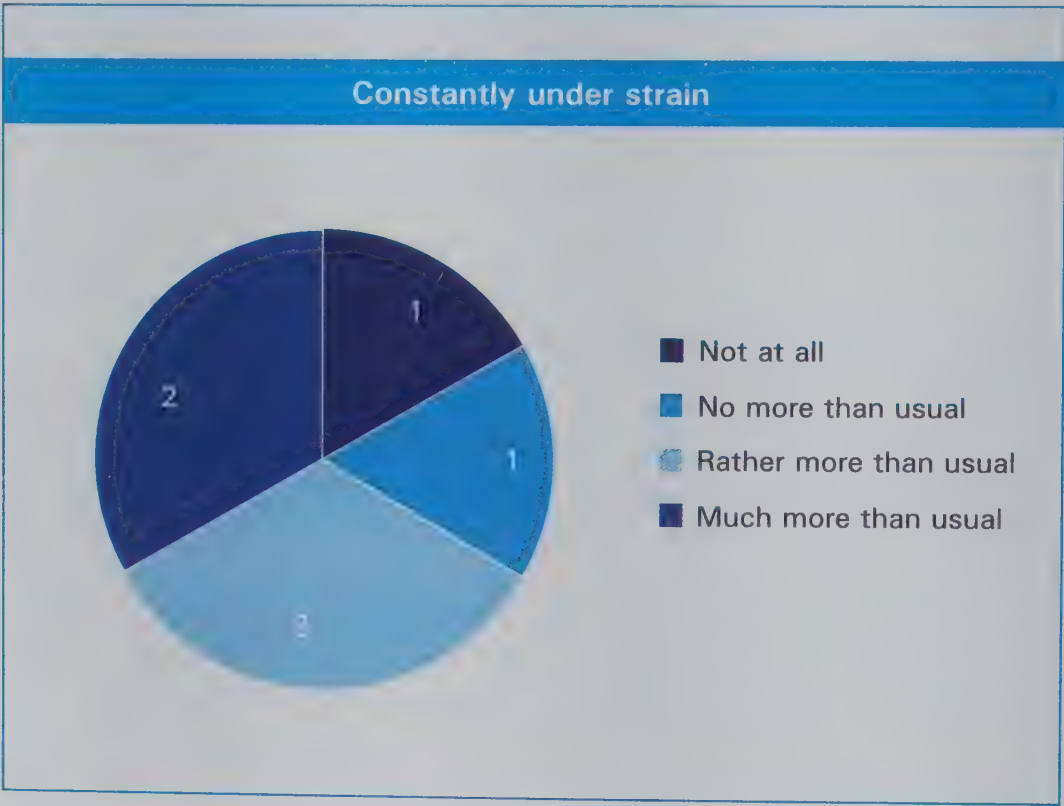
All six MPHWMs-M were asked about the impact of work stress on their sleep patterns (Figure 20). Three MPHWMs-M expressed no change and no more than usual loss of sleep. Three MPHWMs-M shared that they had loss of sleep which was more than usual.

Figure 20: Recent loss of sleep because of work related worry



MPHWs-M were asked to share any recent experience of being constantly under strain because this may directly or indirectly impact their work functioning (Figure 21). While four MPHWs-M mentioned being constantly under more than usual strain; one MPHW-M each expressed to have had no more than the usual and no strain at all.

Figure 21: Recent experience of being constantly under strain



An individual’s ability to enjoy normal day to day activities in turn greatly impacts his/her ability to perform tasks during the day. Thus, as revealed through data, while one MPHW-M reported to have been able to enjoy normal day to day activities more than normal; three MPHWs-M expressed about the same level of day’s experience as before. The remaining two MPHWs-M reported to have had experienced less than usual enjoyment of the day and thus it impacted their daily work.

On being asked about a recent experience of feeling unhappy and depressed, three MPHWS-M expressed that their state was the same while the remaining three said that they were more unhappy and depressed than usual. The MPHWS-M were also asked to share their recent experience of feeling reasonably happy considering both their personal and professional fronts. Two MPHWS-M reported about feeling more happy than usual while three experienced feeling the same. One MPHWS-M mentioned that he felt less happy than usual.

Close ended questions helped in getting responses from MPHWS-M in reference to the impact of their present status of health upon their functioning at the facility and field level. Out of six MPHWS-M, only one expressed having any prior health condition which was of concern to him in his functioning at work. Four MPHWS-M shared that their health status had no impact on their functioning at the facility level while one each said there was a moderate to slight level of impact. Three of the MPHWS-M said that their health status had no impact on their functioning at the field level. While three said that their health status had a slight level of impact on their field level functioning.

10. TRAININGS

MPHWS-M were asked to share the areas in which they felt the need to be trained. Key areas which emerged were 1) New health programmes 2) Child health 3) Computer training 4) Haemoglobin testing 5) Chlorination 6) Diabetes testing 7) New drugs usage 8) Immunisation 9) Technical knowledge (Table 32).

The need for training was expressed largely in terms of building capacities. In the domain of training on new health programmes like *Rashtriya Kishor Swasthya Karyakram* (RKSK) they expressed a need to be given practical hands on training apart from classroom lecture sessions. A specific need to be trained in being able to identify and refer diseases related with children was expressed. The need for computer training to update hand written records on the computer and testing of haemoglobin was also expressed in order to carry out service delivery effectively at the field level.

However, when MPHWS-M were asked about adequate training for the task they perform through close ended questions, five workers agreed that they were trained (three workers strongly agreed and two agreed). One MPHWS-M clearly expressed his strong disagreement about the same. Out of six, except for one all the others reported to have had received computer training.

Table 32: Training areas expressed by MPHWS-M

Item	Frequency
New health programmes	01
Child health	01
Computer training	01
Haemoglobin testing	01
Chlorination	01
Diabetes testing	01
New drugs usage	01
Immunisation	01
Technical knowledge	01

11. SUGGESTIONS GIVEN BY MPHWM TO IMPROVE WORK PERFORMANCE

Key suggestions which emerged from MPHWMs were: 1) Work planning. 2) Regular stocks supply. 3) Enhancing community support. 4) Improving transportation. 5) Providing practical component in trainings (Table 33).

MPHWMs clearly asked for guidance in terms of work planning and preparation of action plans. **MPHWM from Srikakulam** shared *'Though work plan is there but discharging duties as per the same is a must. It's necessary to have this plan and supervisors should help in checking work accomplished in line with it'*. MPHWM also emphasised on the need to build stronger rapport with the community and generate awareness related with health, hygiene and service delivery. The **2nd MPHWM from Srikakulam** stressed upon the need of rigorous use of IEC in the field to build awareness. Another **MPHWM from the district** suggested the involvement of community representatives, leaders, youth etc. through a common platform. One MPHWM suggested that supervisors and higher authorities must ensure availability and regular supply of medicines and other stock material. He gave an example of how if malaria diagnostic kits were unavailable then it could really hamper the identification and referral process in health service delivery during epidemics/outbreaks. **MPHWM from Chittoor** stressed on the need of ensuring better transportation to remote areas so that field outreach could be easier and time saving in terms of time spent on field level travel. A crucial suggestion was made by one **MPHWM from Srikakulam** in reference with pedagogy used in training programmes. He specifically asked for practical training in the training component apart from theoretical inputs which were often given in large groups with limited/no scope for practice.

Table 33: Suggestions to improve work performance as given by MPHWM

Item	Frequency N = 06
1. HEALTH SYSTEM RELATED FACTORS	
Work planning	02
Stocks supply	01
Transportation	01
Practical component in trainings	01
2. INTERPERSONAL AND COMMUNITY RELATED	
Community support	02

5C. ASHAs

A total of six FGDs were undertaken in each of the sample PHCs across three study districts. About 9-11 ASHAs participated in each of the FGDs which lasted on an average of 60 minutes.

In the present Section findings from the FGDs are presented, categorised across major themes and subthemes, for the three districts along with a listing of variations, if any.

1. ROLES AND RESPONSIBILITIES OF ASHAs

ASHAs were asked to share their perceived roles and responsibilities based on their daily work in the field. A range of responses emerged across the three districts (Table 34).

The key roles and responsibilities of ASHAs that emerged through FGDs were identification and registration of ANC women, referral (of ANC women, suspected cases of particular diseases), accompanying patients (including ANC women), community mobilisation and awareness building and motivation. Reducing maternal and child death and diseases were accepted as a common responsibility by all ASHAs of the three districts.

As evident from the table, maternal and child health (MCH) related activities such as identification and registration of ANC women, referral and accompanying of ANC women, PNC care and home visits emerged as common overlaps across the three districts. The ASHAs shared that they played a crucial supportive role with ANMs mostly for ANC and PNC cases. In Chittoor, ASHAs shared that they supported ANMs in handling emergency delivery cases. They also made efforts to make the community aware about Infant and Young Child Feeding (IYCF) practices like breast feeding, intake of nutritious food etc.

ASHAs are also crucial agents of delivering the first line of services at the community level including curative services. ASHAs from all the three districts were involved in giving basic curative care like first aid, medicine distribution and treatment for minor ailments. Patients requiring attention were further referred to the PHC.

Community mobilisation regarding various health services emerged as another common aspect across all PHCs. ASHAs from Chittoor specifically mentioned the community mobilisation they do for people availing 104 services, NHDs. They also motivate the community to opt for institutional deliveries as they are safer. ASHAs in Srikakulam specifically mentioned that they had done chlorination of water bodies and bleaching, distribution of Oral Rehydration Solution (ORS), and motivated the community to adopt family planning methods.

Amongst other roles- symptomatic identification and referral of suspected TB cases were also mentioned by ASHAs in Srikakulam and Khammam.

Table 34: Roles and responsibilities of ASHAs

S.No	PARTICULARS	SRIKAKULAM	CHITTOOR	KHAMMAM
1.	Maternal and Child Health	<ul style="list-style-type: none"> • Mother and child care • ANC women identification and registration • ANC women referral and accompanying them • Support ANM in ANC and PNC check-ups • Home visits 	<ul style="list-style-type: none"> • PNC care • Supporting ANM in handling emergency delivery cases • ANC women identification and registration • Infant & Young Child Feeding (IYCF): Promotion of <i>breast feeding and intake of nutritious food</i> • Home visits • Referral and accompanying beneficiaries • Child immunisation 	<ul style="list-style-type: none"> • Mother and child care • ANC women identification and registration • ANC women referral and accompanying them • Support ANM in ANC and PNC check-ups • Home visits
2.	Other community services	<ul style="list-style-type: none"> • Curative services • Community mobilisation • Chlorination of water bodies and adding of bleach • Oral rehydration solution (ORS) distribution • Motivating community to adopt family planning methods 	<ul style="list-style-type: none"> • NHD promotion • Carrying medicine kits • Treatment of minor ailments • Mobilising community to avail 104 services • Motivating community for institutional deliveries • Attending village meetings 	<ul style="list-style-type: none"> • Curative services including first aid, minor ailments treatment and medicine distribution • Community mobilisation
3	Awareness building	<ul style="list-style-type: none"> • Awareness building on village health and sanitation 	<ul style="list-style-type: none"> • Health education and promotion • Awareness building on village health and sanitation 	<ul style="list-style-type: none"> • Awareness building on village health and sanitation

4.	Others	<ul style="list-style-type: none"> • Symptomatic identification and referral of suspected TB cases • Identification of epidemics 	<ul style="list-style-type: none"> • Adolescent health education • Preventing child marriages • Motivating community women to adopt spacing methods • Motivating newly married couples to adopt family planning measures • House surveys • Follow ups • Support ANM on special days like pulse polio programme • De-worming 	<ul style="list-style-type: none"> • Symptomatic identification and referral of suspected TB cases • Preventing child marriages • Motivating community women to adopt spacing methods
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2. ASHA ACTIVITIES

2.1 ASHA activities consuming maximum time

Across the districts, ASHAs were asked to prioritise a list of five pre-determined activities based on their actual work functioning on a daily basis in the field. The list consisted of i) home visits, ii) attending village level meetings, iii) visit to health facility, iv) maintaining records, and v) attending NHDs. This pre-determined list of five key activities was generated based on multiple field visits done in the formative phase of the study and cross-verified through field level people like MOs, supervisors, ANMs and ASHAs themselves during the pilot study done in Medak District.

Home visits were the most important activity for ASHAs across the PHCs except for ASHAs from Kusimi PHC of Srikakulam where it was at second place (Table 35). ASHAs found maintaining records was the fourth or fifth priority activity. ASHAs had a tour diary in which they mentioned details of beneficiaries visited in the field based on which their incentives were determined. Other activities were listed in different orders of priority by ASHAs at different PHCs.

Table 35: Top five activities consuming ASHAs time in daily work functioning

SRIKAKULAM		
S.NO		
1.	Non-tribal PHC	Tribal PHC
a.	Home visits	Visit to health facility
b.	Attending NHDs	Home visits
c.	Attending village level meetings	Attending village level meetings
d.	Visit to health facility	Attending NHDs
e.	Maintaining records	Maintaining records
CHITTOOR		
2.	Non-tribal PHC	Non-tribal PHC
a.	Home visits	Home visits
b.	Attending village level meetings	Attending village level meetings
c.	Visit to health facility	Visit to health facility
d.	Maintaining records	Maintaining records
e.	Attending NHDs	Attending NHDs
KHAMMAM		
3.	Tribal PHC	Non-tribal PHC
a.	Home visits	Home visits
b.	Attending village level meetings	Visit to health facility
c.	Attending NHDs	Attending NHDs
d.	Visit to health facility	Maintaining records
e.	Maintaining records	Attending village level meetings

2.2 HOME VISITS

ASHAs were asked to share information about the frequency of their home visits and specific activities which were accomplished while they undertook the same (Table 36). In Srikakulam, ASHAs did home visits once in a month while in Chittoor it was almost once in a week. One of the ASHAs from Khammam mentioned that *'since we stay in the village itself so whenever we go out even for personal work it is easier to inquire about the well-being of the villagers and if any case is noticed the ANM is informed about the same.'*

During home visits ASHAs accomplished activities mainly related with maternal health i.e. follow ups of ANC and PNC women, basic curative care for those in need, follow ups in general i.e. for DOTS' patients, health education, motivation etc.

Table 36: Specific activities done by ASHAs during home visits

PARTICULARS	SRIKAKULAM	CHITTOOR	KHAMMAM
ANC and PNC services	<ul style="list-style-type: none">ANC and PNC women follow upsPromoting nutrition for ANC womenPromoting breast feeding practices among PNC women	<ul style="list-style-type: none">ANC women identification, registration and follow upPromoting nutrition for ANCPromoting breast feeding practices among PNC women	<ul style="list-style-type: none">ANC women identificationPromoting breast feeding practices
Others	<ul style="list-style-type: none">Curative care like first aidDOTS treatment and referralsEducating women about spacing methodsHealth and hygieneBlood smear collection	<ul style="list-style-type: none">DOTS treatmentHealth and hygieneIdentifying eligible couples	<ul style="list-style-type: none">Follow up leprosy casesCurative care like tablet distributionBirth and death registration

2.3 INCENTIVES AND ASHA ACTIVITIES

During the FGD, ASHAs were asked to share information about incentives received by them for various activities they accomplish (Table 37). Across the three districts it can be seen that activities mainly related with maternal and child health like completion of ANC check-ups, immunisation doses for children, accompanying delivery cases to the health facility, mobilisation activities like 104 Service Day, family planning operations, NHDs, ASHA days etc. These mostly incentivise the work of ASHAs thus were accomplished on priority.

There were a few of non-incentivised activities stated as well like de-worming as shared by ASHAs from Chittoor, blood smear preparation as reported by ASHAs in Srikakulam and accompanying patients to health facility was mentioned by all.

Table 37: Incentives and ASHA activities

SRIKAKULAM	CHITTOOR	KHAMMAM
<ul style="list-style-type: none">• Maternal and child health related services• Accompanying delivery cases• Mobilisation activities like 104 Service Day• NHD• ASHA day/meeting• Bringing cases for family planning operations	<ul style="list-style-type: none">• Accompanying delivery cases• Bringing cases for family planning operation• Completing immunisation doses like measles, booster dose, on polio day• ANC registration and services completion (<i>TT & four checkups</i>)• ASHA day/meeting• NHD• Surveys	<ul style="list-style-type: none">• Maternal and child health• Accompanying delivery cases• NHD• ASHA day/meeting• Bringing cases for family planning

ASHAs were also asked to share information about any external opportunities to work presented to them because of their work. These are important in the light of the fact that ASHAs are voluntary health activists and incentives do not generate enough money to serve as a regular income source for their families. ASHAs across the districts denied that any such opportunities were available. A few of them did mention working as agricultural labourers or coolies in the fields.

3. COORDINATION BETWEEN ASHAs AND ANGANWADI WORKERS/HELPERS (AWW/AWH) FROM ICDS SCHEME

ASHAs shared a range of activity areas through which their work crucially intersects with that of the AWW from the ICDS Scheme/WDCW Department. ASHAs mentioned working with AWWs in identifying beneficiaries i.e., ANC and PNC women and children for immunisation. ASHAs further shared that AWWs were helpful in generating health education and maintaining records. The AWWs were a great support especially on special days like Immunisation Day and NHDs. ASHAs also shared that they helped AWWs in the distribution of nutritious food on NHD and other days. ASHAs from the non-tribal cluster PHC unanimously mentioned *'On Immunisation Day, we do weight checking along with AWW. On the Pulse Polio Day, along with AWW and ANM, we go to houses to call people for polio immunisation.'*

Apart from the above, ASHAs from the tribal cluster PHC, Srikakulam accepted that on the day of any kind of survey both the AWWs and ASHAs work together. In Chittoor, AWWs also helped in updating birth and death registers. In Khammam, ASHAs shared that they worked together with AWWs during house visits and on Immunisation Days.

ASHAs and AWWs go the field together and on NHD at the AWC, the ASHA checks the weight and height of the children and on the Pulse Polio Day both work together. If there are any surveys, then also we both work together.

4. FACILITATIVE FACTORS FOR ASHAs

During FGDs, ASHAs were specifically asked to share facilitative factors which enable them in functioning better. A sense of community service and responsibility towards villager's health was found to be a common facilitating factor for ASHAs across all the three districts.

Key factors which helped them in their work were 1) Sense of community service and responsibility towards villagers' health. 2) Support from the community, and 3) Support from Co workers like ANMs, and AWWs. ASHAs said in one voice,

We feel like it is God's gift for us to be able to help the villagers. We feel good about motivating the people of the village about health habits which are really helpful for the villager's health. We tell people about hygienic conditions. We feel that we are responsible for reducing the maternal deaths and improving their overall health. People say that because of ASHA they survived the disease and this gives us satisfaction. In some cases of successful deliveries we get the satisfaction of helping them out. People in the village respect us. If there are any village development programmes we are called for the meetings. Village committee people help us in giving information about the chlorination done in the village. Any information about the health status of villagers is also informed to us.

In Chittoor, one of the ASHAs from one of the non-tribal PHCs spoke about her efforts for maternal and child health leading to a reduction in maternal deaths.

The hard work of ASHAs helps to reduce maternal and child deaths. In one of the delivery cases, the foetus was dead inside the woman's womb. I accompanied her up to a private hospital but the staff did not respond clearly. So I took the patient to the government hospital and stayed with her for three days. The mother's life was saved. Such cases encourage ASHAs and make us feel happy and satisfied.

ASHAs from another non-tribal PHC, Chittoor unanimously said,

We feel good about creating awareness in the village about the treatments. We feel satisfaction about the good work we are doing and we are able to help more people in the village. Some of the people used to conduct the deliveries at home itself. We were able to motivate them to get it done at the government hospital. We tell them to take iron tablets and provide nutritious food to the ANCs. Motivating the villagers for the betterment gives us great satisfaction and this in turn helps in our work. Due to the ASHA work, we get recognition in the village and many people come to us for collecting medicines. We even inform them about the preventive measures and vaccines which need to be taken.

ASHAs in Khammam also derived great satisfaction from community service which in turn facilitated their work functioning as ASHAs. ASHAs from a **non-tribal PHC** shared

We feel happy and proud that we are helping the villagers to improve their health. It is only because of our hard work that the mother and child death numbers are decreasing. By helping the poor people during deliveries, we are able to help them save a lot of money (Rs. 15000/-) which they might have to spend in private and family is also able to get Rs. 1000 from JSY scheme. We take care of the TB, leprosy and other patients by providing them the correct medicines and taking them to hospital when required. Due to all this our recognition in the village increases.

5. CHALLENGES FACED BY ASHAs

Work as ASHAs is indeed hard to accomplish, given the nature of tasks they have with the major responsibility of working with community people for their good health. ASHAs across the PHCs were asked to share information about the challenges which they face in their work. The findings are presented below.

The factors which were a mix of health system at the community level, were shared as common challenges across the three districts- 1) Accompanying patients during emergency cases especially at night and with no accommodation at the health facility. 2) Community resistance and lack of support.

In Srikakulam, ASHAs identified difficulty in travel, no regular income and local (tribal) community's beliefs, as challenges. The lack of regular income emerged as an issue in Khammam as well. In Chittoor, the lack of family support and local community beliefs emerged as major challenges. Both in Khammam and Chittoor, the lack of ASHA drug kits prevented ASHAs from catering to immediate curative care needed by the villagers. In Khammam, ASHAs also complained that stationery was not given from the department; they had to bear costs from their own pockets.

ASHAs in Srikakulam shared very crucial aspects related to restricted mobility especially during emergency delivery cases at night. The narrative from ASHAs of **non tribal PHCs** brings forth a range of issues faced by an ASHA. They shared

We do not have auto facility so it takes more time for us to go to hospitals. It's compulsory for us to accompany woman in labour pains because of which we have to spend more time in hospitals and sometimes we have to attend cases at night as well. We do not receive enough support from the family. All the money which is received as incentive for the delivery is used up in the costs for travelling and stay at hospital. We do not receive any basic help from patient's family either, while accompanying the delivery case. Moreover, people in the village ridicule us and make fun of the box (medicine box) by referring to it as a movie box. Villagers demand work from us at odd times and talk rough. There are no proper timings for us to work and this creates a major problem in organising the work.

ASHAs from the **tribal PHC of Srikakulam** shared the challenges of serving in remote hilly tribal habitations. They said

As area is hilly, so it takes us more time to travel up from the hill to hospitals in the case of emergency. We face even more problem during rainy season as the vehicles for transportation are few and to reach some villages we have to walk a minimum of 4-8 kms. We don't get any support from our families either because our income from incentives is very low compared with the amount of work we do. We have to work more to make a better earning. Moreover, villagers do not keep their surroundings clean. They don't listen to instructions given and this leads to a lot of diseases. Many of the villagers have superstitious beliefs in relation to causes of diseases. They prefer home deliveries and also don't want to go to government hospitals. Only when the case is complicated they approach hospital staff. The villagers do not co-operate in adopting family planning methods. If in case, after the family planning operation, a child of the family dies, ASHA is held responsible and is scolded by the family members for trying to motivate them about family planning. No accommodation is provided to us when we accompany any woman about to deliver. Thus, we have to travel back and forth which increases our transportation charges and even money for food is incurred additionally from our pockets. Some of the drunk people in the village abuse us during our house visits.

ASHAs serving in the tribal area of Srikakulam brought to the fore crucial aspects related with the tribal’s socio-cultural beliefs and practices conflicting with mainstream allopathic practices. As a result there was community resistance which made the ASHAs work even more difficult along with other factors. Security was also expressed as a concern for the women while serving in the hamlets.

Conflicting community beliefs with that of the key health service delivery mechanism from the health service system were seen in Chittoor as well. ASHAs from the **non-tribal PHC** shared

In some immunisation cases, if a child gets fever then villagers blame ASHA for making the baby suffer with the fever.

Continued follow up with cases was a challenge because of community resistance. As shared

It is also difficult for the ASHA to make some of the villagers follow the suggested treatment plan even after regular home visits and motivation. They continue with their own local self-healing practices and come to hospital only in the last stages.

Violence created by few of alcoholics impeded ASHAs work was considered as challenge in Chittoor as well. In Chittoor, caste bias emerged in the form of challenges involved in motivating people from a particular caste because of their own beliefs and practices.

ASHAs from Khammam mentioned an important aspect related with stocks supply of ASHA drug kits and inter-related trust factor associated with the community. ASHAs from the tribal PHC shared

Because of less or no supply of medicines we are unable to provide enough medicines to the villagers. As a result their trust in us is decreasing.

6. SUGGESTIONS GIVEN BY ASHAs TO IMPROVE WORK PERFORMANCE

Across the three districts, a few common suggestions emerged which are presented below (Table 38).

Firstly, ASHAs should be regularised and paid a fixed monthly salary. The incentives that they receive are too meagre to run their house expenses and they do not receive the incentives regularly either. In Khammam, ASHAs were on a state wide strike (at the time of the study, September end 2015) because of non-payment of incentives for 36 months.

Secondly, uniforms should be provided regularly. In Srikakulam, ASHAs shared about receiving uniforms once in three years and mentioned that the colour should be changed.

Thirdly, ASHAs should be given stationery expenses or supplies along with torch lights and batteries. Many a times they have to travel at night to attend emergency cases and torches would be greatly helpful in such cases.

Fourthly, either accommodation should be provided to the ASHA while accompanying an ANC woman in labour or allowances should be given so that they can manage their daily expenses

of stay and food.

In Srikakulam and Chittoor, ASHAs expressed that they should be given monthly communication allowances and ASHAs who do not have mobiles should be given one. This would greatly help in communicating not only with the villagers but also with the ANMs. Transport facilities should be made available to them so that they can take the women about to deliver to the health facility especially in remote areas of Srikakulam. Travel allowance will also help them in hiring a vehicle rather than spending from their own pockets. In Chittoor, ASHAs specifically asked for bicycles which would greatly help them in moving around for their work.

In Daskuppam PHC of Chittoor (non tribal cluster PHC), a specific suggestion was made by ASHAs. According to them eligible ASHAs based on their educational qualifications should be promoted to ANMs after training. They are well connected with the community which will help in the work as well.

Table 38: Suggestions from ASHAs

SRIKAKULAM	CHITTOOR	KHAMMAM
<ul style="list-style-type: none">• Fixed salaries• Improving '108' services• Providing stationery, torch lights etc• Providing uniforms• Travel mobility support• Communication allowances• Providing accommodation while accompanying patients	<ul style="list-style-type: none">• Fixed salaries and regularisation• Providing uniforms• Providing stationery and torch lights etc• Communication allowances• Travel mobility support (transport allowances)• Membership in VHSNC (<i>importance for ASHA in village committee meetings</i>)• Recruit eligible ASHAs as ANMs after training• Providing accommodation while accompanying patients	<ul style="list-style-type: none">• Fixed salaries• Trainings & promotions• Providing more drugs• Accommodation (<i>When accompanying ANC for delivery</i>)• Providing stationary• Providing uniforms• Health cards and insurance• Fixed holidays• Recruit eligible ASHAs as ANMs after training• Providing accommodation while accompanying patients

In all the three districts ASHAs expressed that they should be given periodic ASHA trainings which would enable them to develop their skills better. In Srikakulam and Chittoor, ASHAs asked for DOTS training related with TB patients. In Chittoor, the ASHAs specifically suggested that trainings on feeding techniques and refreshers related to specific issues should be organised. They should also involve practical exposure.

5D. PERCEPTIONS AND SUGGESTIONS FROM HEALTH DEPARTMENT OFFICIALS

A. DISTRICT MEDICAL AND HEALTH OFFICER

1. FACTORS IMPACTING FUNCTIONING OF HEALTH WORKERS

In-depth interviews with the DMHOs of the three study districts helped in understanding a range of factors which crucially impact the functioning of health workers like ANMs, MPHWs-M and ASHAs. It can be clearly seen across the districts that the introduction of multiple health programmes along with additional components being added to existing programmes did add to the work load of FLHWs and ASHAs. This becomes even more crucial in the realm of a limited number of filled positions and the role of a MPHW-M, which has been overlooked in health service delivery. Detailed findings from the interviews are presented below.

The **DMHO, Srikakulam** shared some key factors which impact the work of FLHWs and ASHAs which are 1) Supervision 2) Work planning 3) Training 4) Multiple health programmes and records 5) Geographical terrain.

The official was clearly of the opinion that in order to improve time utilisation and performance of workers it is necessary to strengthen mid-level supervision through health supervisors. Until and unless FLHWs are guided well by their respective supervisors and ASHAs by their ANMs, improving the service delivery component would remain a challenge. Work planning in the form of ATPs is very essential so that the workers can plan the day, week and month. Monitoring stringent implementation of the same by supervisors is very much crucial. However, it should be flexible enough to accommodate any emergency situations without compromising on the tasks to be delivered. There is need to impart training to health workers for their skills building with refresher training courses for the revival of the same. This should happen in smaller groups at the PHC level which would also help them to focus more on each of the participants. There was a clear recognition of the fact that in recent times along with the introduction of multiple health programmes numerous reporting formats have also been introduced with consequential impact on time utilisation by the workers. Srikakulam is a district which comprises of hilly remote terrain with tribal habitations. This kind of geographical terrain and nature of the population also impacts the time utilisation and performance of the workers.

The **DMHO Chittoor**, recognised some key factors impacting the work of FLHWs and ASHAs which were a mix of both health service system and community related- 1) Multiple health programmes. 2) Vacant positions. 3) Less focus on profile of MPHW-M. 4) Load of maintaining records. 5) Community level factors. 6) Trainings 7) Supervision 8) Coordination between 1st ANM and 2nd ANM. 9) Lack of facilities for e.g. while accompanying women due for deliveries. 10) Motivation (non-financial incentives).

Multiple health programmes, vacant positions and significance of MPHW-M: Officials clearly recognised that in the recent past, the ANM cadre has witnessed a drastic increase in duties because of the introduction of newer health programmes with additional demands. There have been no recruitments for the vacant positions. At present, there are 220 posts vacant out of 1200 sanctioned for ANMs in Chittoor District. Apart from filling vacancies there is a need to sanction more posts. In such a situation, the MPHW-M can play a vital role, however the focus has been entirely on the recruitment of ANMs and there is no mention / plans for recruiting MPHWs-M. This is also partly because of the fact that there is an intense focus on MCH services making ANMs an important cadre in the existing field level health workforce whereas

MPHWs-M have been overlooked. It should be kept in mind that the delivery of health services related with all national health programmes can be crucially undertaken by MPHWS-M. He can also be involved in NCD related programmes which are presently being done by the ANMs. There is certainly a need to involve MPHWS-M in mainstream health service delivery for other vital functions related with population health.

Load of maintaining records: In addition to a range of service delivery functions, ANMs are quite loaded with a range of reports, formats and registers which in turn impacts the frequency and duration of their field work.

Community level factors: Covering larger populations with a limited number of workers naturally leads to more time being utilised for activities. Following up in the community becomes a major impeding factor and more so in the case of resistant and migratory community members.

There is also a positive side to community related factors. Rapport with the community and support received is a big motivation for ANMs and specially ASHAs in performing their work

Providing facilities to workers: The MCH programme requires the ANM to accompany the high risk pregnant woman and the ASHAs to accompany other women about to deliver. However, ANMs and ASHAs are reluctant to accompany the women because of a lack of facilities to stay at the health facility. ASHAs are doing good community level work and they along with their families can be provided with certain free services at the PHC as an incentive.

Training: Performance is greatly impacted by the level of training and relevant skill sets attained. This has to be in line with the nature of duties performed by each of the cadres.

Supervision: Supervision greatly impacts the performance of health workers. There are cases where ANMs have been promoted to the supervisory cadre, by virtue of seniority, but lack the managerial skills which are required for a supervisory role. Most of them just end up collecting monthly reports. Additionally, as they have grown through a similar work culture as ANMs there is a feeling of sisterhood too, so the supervisors tend to be lenient with the working ANMs. There is hardly any supervision for the MPHWS-M.

DMHO, Khammam shared some key factors mainly related with the health service system which impact the functioning of health workers 1) ASHAs support. 2) Presence of MPHWS-M. 3) Multiple health programmes and limited workforce. The official said that in recent times a lot of newer aspects related with health programmes like TB, Malaria survey, online MCTS tracking etc. have been introduced. This is in a situation when there are a limited number of health workers to accomplish the work on time. It also leads to the loss of focus which needs to be regained.

FACTORS IMPACTING FUNCTIONING OF HEALTH WORKERS

Summary points

- ASHAs support
- Task delegation (coordination between workers like 1st ANM & 2nd ANM)
- Multiple health programmes
- Overlooked significance of MPH-W-M
- Vacant positions
- Recording load
- Community support
- Improved facilities for accompanying health worker
- Trainings
- Supervision
- Worker's self-motivation (non-financial incentives)
- Geographical terrain

1.1 Coordination between FLHWs (ANMs, MPH-W-M) and ASHAs

As shared above, the DMHOs across the districts clearly accepted that mutual co workers support exists between the 1st and 2nd ANMs, ASHAs, and MPH-Ws-M, which crucially impacts the functioning of health workers.

With reference to work coordination between the 1st ANM and 2nd ANM, the **DMHO, Chittoor** shared that two grades had been created within the ANM cadre for task sharing. It had been conceptualised that the 2nd ANM would support the 1st ANM in accomplishing work tasks. Well coordinated concerted efforts between the two ANMs greatly impacts overall service delivery and the worker's individual performance. But in actual practice, the 1st ANM ends up transferring a larger part of her work onto the 2nd ANM instead of dividing it uniformly. Though a government guideline did talk about demarcation of roles and responsibilities of the 1st and 2nd ANM, it is seldom seen on the field. The 2nd ANM is a contractual worker and gets a much lower salary than the 1st ANM. There is also a feeling of dissatisfaction among many because they essentially do the same or more work than the 1st ANM in most of the cases. It is very necessary that both the ANMs clearly divide the work area and impart the same services in each of their areas without any duplication. The **DMHO Khammam**, specifically mentioned that their mutual coordination was very important on special days like Immunisation Day in order to achieve full coverage and meet the set targets. Work related with RCH, specifically family planning is totally dependent upon them and their mutual coordination is of utmost importance.

Coordination between ANMs and ASHAs is also very crucial in MCH related service delivery at the field level. The DMHOs from Chittoor and Khammam clearly recognised this fact. An observation shared by the **DMHO Chittoor** was that though ANMs and ASHAs mostly work as a team there are certain instances where ASHAs are treated as assistants. Some ANMs expect ASHAs to visit the SC on a daily basis. The ASHA is a voluntary health activist and as per the original conceptualisation of the ASHA cadre she is supposed to visit the SC only once in a

week and may be more often in an emergency situation. On similar lines **DMHO Khammam** shared that the ASHAs have been on a state-wide strike for the past one month. They are the best asset for health service delivery and a base for performance of ANMs. In their absence from the field, work performance and functioning of ANMs is certainly impacted. An example of Mission Indradhanush was given where the presence of ASHAs would have been a crucial base for ANMs.

Role of MPHW-M and coordination in the field is very important. The **DMHO Khammam** shared that because of the ASHA strike, MPHWs-M have been assigned additional tasks so that the operations are carried out smoothly. The **DMHO Chittoor** also reiterated that presence of MPHWs-M makes it much easier for ANMs to divide the tasks and utilise less time for the tasks.

Coordination between FLHWs (ANMs, MPHW-M) and ASHAs

Summary Points

- On special days & drives (Immunisation, surveys etc)
- Accomplishing routine daily tasks (Family planning etc)
- Role clarity and balanced task sharing (clear in practice role demarcation between 1st ANM & 2nd ANM)
- ASHA support for ANMs work

2. WORK PLANNING BY FLHWs AND ASHAs

There are various factors which impact the regular work plan and consequential work load of FLHWs and ASHAs in a diverse manner.

DMHO, Srikakulam insisted that FLHWs and ASHAs made their work plans with an ATP well laid out. Supervisors can certainly be of great help in accomplishing the same.

DMHO, Chittoor shared some key factors specific to Chittoor which impact the work planning by FLHWs and ASHAs. 1) Vacant positions. 2) Task sharing between 1st and 2nd ANMs. 3) Multiple health programmes. 4) Unscheduled official events.

According to the **DMHO**, there is a manpower deficit of grassroots public health functionaries in the district. In the realm of vacant positions and limited workforce, the work load of existing workers automatically increases and this results in more time being utilised. Their priorities are divided across a range of activities in order to meet the service delivery related functions and other activities like recording etc. As observed in the field, there is a lack of clear task sharing between the two ANMs. This either leads to duplication of work or lacunae in accomplishing existing tasks. A clear demarcation in practice would certainly enable ANMs to plan well and execute accordingly. This becomes even more important in the situation of newer health programmes being introduced along with revived components in the existing national health programmes. Moreover, the skill sets of the workers are also not being updated as per the requirement. Well trained workers would certainly be able to understand and execute the task in an efficient manner. There is a clear case of multiple priorities and a clear work plan prepared with guidance from supervisors would certainly enable the ANMs to cater to the epidemiological needs of the population at large. It was also observed that unscheduled meetings, trainings and non-health related tasks (from other departments like election duty etc) disrupt the existing work plan of the FLHWs and ASHAs. Either the workers should be informed about these events beforehand or the plan should be made realistically in such a manner that it can accommodate such variations in the schedule. The ANMs have activities scheduled for 20 out of 25 working days in a month, so a realistically prepared work plan can enable

her to accommodate a missed day on account of meetings or training on the non-scheduled working days. The DMHO also brought forth an important factor which was related to the larger environment in which these workers operate. There is an urgent need to reduce political interference especially in the work of the MPHWS-M. Politicisation only interferes with the work and overall planning.

DMHO, Khammam analysed the work planning by FLHWs and ASHAs and factors that affect implementing the same in terms of three aspects 1) Public health emergencies 2) Multiple health programmes and vacant positions 3) ASHA support to FLHWs. The DMHO clearly mentioned that emergency and epidemic situations like fever increase the work load off field level workers and put a lot of pressure on them. Because it is a public health emergency it gains top most priority for district officials from top to bottom which is also reflected in the day's work of FLHWs and ASHAs. This shift in focus certainly impacts other vital service delivery components of the workers and this is further aggravated by vacant positions. Reiterating the comments made in Chittoor, here also multiple health programmes and initiatives were found to be crucial factors impacting the planning and execution of tasks by workers. The official clearly recognised the significant support provided by ASHAs to FLHWs by virtue of them being village level health activists and knowing the situations and cases better. The ongoing strike was certainly impacting normal work planning and the work load of the FLHWs.

WORK PLANNING BY FLHWs AND ASHAs

Summary Points

- ATPs and work planning
- Vacant positions
- Task sharing between 1st and 2nd ANMs
- Multiple health programmes
- Unscheduled official events (health and non-health related)
- Public health emergencies
- Support of ASHAs
- Reducing political interference
- Trainings

3. KEY STRATEGIES ADOPTED IN THE PROGRAMMES FOR EFFECTIVE FUNCTIONING OF FLHWs and ASHAs

The DMHOs shared the key strategies which they had used in their districts in order to improve the functioning of FLHWs and ASHAs.

The DMHO Srikakulam spoke about deputations done in the district especially in higher load areas. This had been done in order to compensate for the manpower crunch and to continue with service delivery at the PHCs/SCs wherever there was a requirement. He also mentioned the impact of neighbouring state Tamil Nadu (TN) on public side demand of services in the district. To meet the same, with guidance from the District Collector they had devised mega camps across the district at the cluster level for maternal health related services where high level facilities like ultrasound were also provided. The DMHO also spoke about larger level systemic

efforts to build political awareness in the district also manifesting in the domain of health. Zilla Parishad meetings were organised in the district on a regular basis, where one of the main agendas was to discuss health and explore ways of liaising and improving the services. Overall, the political environment in the district was inclined towards improving the community's health status.

In Khammam, the DMHO spoke about the high mortality among populations because of large fever load across. To curb the same, the district health administration had constituted 60 'Epidemic Surveillance Teams' in crisis areas for close surveillance during epidemics. For 40 core tribal areas special teams had been constituted. These surveillance teams covered 2900 villages out of which more than 1300 were high risk villages.

KEY STRATEGIES ADOPTED IN THE PROGRAMMES FOR EFFECTIVE FUNCTIONING OF FLHWs and ASHAs

Summary Points

- Deputations
- Special district level initiatives like mega camps, surveillance teams for crisis areas
- Active Zilla Parishad meetings: Political awareness building and commitment towards health

4. SUGGESTIONS TO IMPROVE THE PERFORMANCE

Some major suggestions emerged from the DMHOs based on their experience and understanding about the district. The findings are presented below (Table 39).

Across the three districts, a common suggestion related with realistic work planning and devising of ATPs emerged. This could help health workers plan their tasks better in the given amount of time. It needs to be periodically revised as well based on the requirements and should have sufficient scope to accommodate deviations, if any. In Chittoor and Khammam, filling up of vacant positions and trainings emerged as common recommendations, details of which are given below.

In Chittoor and Khammam, the DM&HOs very clearly emphasised on the need of filling up vacant positions in order to address the health workforce crisis especially at the ground level.

The Chittoor DMHO articulated certain suggestions which, if implemented, could significantly help the district health administration 1) In practice demarcate the roles and responsibilities of the 1st and 2nd ANMs by making each one of them responsible for specific areas. 2) ANMs should compulsorily escort high risk delivery cases (in practice) while provisions for their accommodation and safety concerns need to be addressed. 3) Supervision component needs strengthening and supportive supervision has to be provided to workers. 4) Health workers are over-burdened in certain areas for which reorganisation of both areas and job charts is essential. 5) Curbing intentional absenteeism with punitive actions. 6) Periodic refresher trainings should be organised where apart from technical skills the focus needs to be laid on the development of softer skills amongst health workers and the supervisory cadre. 7) Improved rapport with the community will greatly enable efficacious service delivery.

Overall the DMHO felt that though the FLHWs task is large it is doable especially with the provision of the 2nd ANM and better co-ordination between ANMs and ASHAs. She felt that though there are a large number of health programmes to be implemented through ANMs the burden is not because of the number of programmes; it is more so because of the way the tasks are organised and taught to the ANMs for every new programme. There needs to be a different approach to training and the ANMs need to be helped to organise their work accordingly.

The Khammam DMHO came up with suggestions which were a mix of aspects related with the health service system, convergence and behavioural aspects related with the FLHWs and ASHAs. The official shared the following key recommendations 1) Dynamic Health Management and Information System (HMIS) is needed. For this tracking has to be improved with on time uploading of records. 2) Vacancies especially for female workers need to be filled. 3) Strengthening of PHCs infrastructure especially in terms of equipment availability and maintenance mechanisms. 4) Cadre specific trainings. 5) Improving softer aspects related with service delivery like doctor-patient behaviour. It is very crucial for the effective delivery of services especially when patients find asymptomatic treatment more important. Empathy needs to be inculcated in doctors right from medical training times. The same is applicable for FLHWs and ASHAs as well. 6) Emphasis on preventing and promotive measures to keep good health through intense health education. 7) Improving inter-department convergence without disrupting worker’s work plan. 8) Need to more intensely involve PRIs, ICDS and health supervisors on a common platform to improve health service delivery. 9) Training our doctors as good managers too, though they are very good at clinical practice. Development of their softer skills is a must.

Table 39: Suggestions made by DMHOs

<ul style="list-style-type: none">• Dynamic HMIS• Filling up vacant positions• Strengthening PHCs• Trainings• Improved patient-staff interaction• Emphasis on health education• Improvement in inter-department convergence• Political awareness building• Work planning and adherence to ATPs• Role clarity between ANMs• Improved facilities for accompanying workers• Supportive supervision• Corrective actions to curb absenteeism

B. SENIOR PUBLIC HEALTH OFFICER (SPHO)

In each of the districts, two SPHOs were interviewed at each of cluster levels. In total six SPHOs were interviewed for the TAM study. The findings are presented below.

1. HEALTH WORKERS: STATUS, SIGNIFICANCE and WORK LOAD MANAGEMENT

SPHOs across the clusters were interviewed to share the status of FLHWs positions in their respective clusters. The issue of vacant positions with consequential multi-tasking compromising on quality aspects emerged repetitively across the districts as a major challenge in work load management. Deputation was the common strategy defined to partly address the challenge.

There are vacancies for FLHWs across health facilities in the study clusters. In such circumstances, in certain SCs a single FLHW ends up doing all the work. In districts like **Srikakulam**, given the situation of inaccessible remote habitations situated in a hilly terrain, the lack of workers becomes even more of a critical issue. One person has to cater to multiple locations. At certain times supervisors also share the ANMs work. It has been observed that, under most circumstances, the population staying close to the SC benefits while those staying farther are at a disadvantage most of the times. A strong need to involve the MPH-W-M in service delivery was expressed and the important role they play in the national vector borne disease control programmes was articulated. In **Khammam**, the issue of supervisor's positions being vacant had also come up.

Because of the vacant positions FLHWs had been sent on deputations across PHCs/SCs especially to health facilities with vacant position(s) and high population load. These were quite challenging at the end for FLHWs because they had to cater to two locations at the same time: their original posting location and the location to which they had been deputed. There was a clear realisation that *'ANMs are over-burdened due to these adjustments. At some of the places where these adjustments were made, the work and quality also was hampered'*. In **Chittoor**, specifically in the non tribal cluster Daskuppam PHC, there was only one MPH-W-M with 39 villages under him which naturally was difficult for him to cover alone. In case of vacant ANM position(s), the MPH-W-M is very important as a support to the ANM who otherwise has to function single-handedly. The MPH-W-M has been of immense help during public health emergencies like fever epidemics and camps established for the same, in data uploading for online MCTS tracking etc. In **Khammam**, an important feature emerged with reference to the posting and promotions of the MPH-W-M. The SPHO shared that in Nellakondapalli cluster (tribal), there was no MPH-W-M working at present. The earlier MPH-W-M who was posted there got promoted and the position remained vacant for more than two years.

Summary points

Part A: Status

- Vacant positions of FLHWs and supervisors

Part B: Work load management

- Deputation
- Multi-tasking
- Supportive role played by Co workerss (MPHWs-M, Supervisors)

Part C: Challenges

- Vacant positions and consequential increase in workload
- Reduced quality
- Non-performing workers

1.1 Role of ASHAs in health service delivery

Across the districts the ASHAs role was found to be very significant in the delivery of health services to the village community. As expressed by the SPHOs who were interviewed, ASHAs play a supportive role to ANMs by coordinating with them in terms of identification of cases like high risk delivery women, support during public health emergencies like epidemics etc.

Since the ASHA is from the village itself so she is very helpful in facilitating rapport with the community and mobilising them to avail health services. The ASHA is a member of the Village Health, Sanitation and Nutrition Committee (VHSNC) which directly caters to a lot of health and sanitation issues emerging at the village level. She attends other village level meetings as well, connecting the community directly with the health services. The ASHA also accompanies beneficiaries to health facilities whereas for ANMs it is not always possible to do so.

1.2 Factors impacting work planning by health workers

Across the three districts a range of factors were identified by SPHOs which impacted the work planning of health workers. These are listed below.

- 1) Terrain features in terms of hilly and remote terrain with scattered habitations, like in Seetampeta cluster of Srikakulam District.
- 2) No or restricted transport facility to commute from home to the health facility and further to the field area. During monsoons, the habitations located in the hills of Seetampeta in Srikakulam are totally cut off because of no concrete roads. The ANMs usually prefer to stay in localities which have facilities like schools etc for their children. As discussed in the socio demographic section of FLHWs, though SCs had quarters attached they had no basic facilities. Thus, their residences were not always close to the SC and as a result travel was involved.
- 3) Vacant positions of supervisors and FLHWs. This not only increased the work load but also led to multi-tasking by workers many times which, as shared, did create challenges in performing tasks well.
- 4) Physical health of the FLHWs and ASHAs: As shared, the 2nd ANMs were on contract with no maternity leave. So service delivery had to be accomplished even during the pregnancy which indeed impacted planning and execution.
- 5) Local festivals and mass scale events like Pushkaralu in TS. During those time the district health priorities are totally ignored and priority is given to the management of the event in the given situation of the worker's existing constrained work schedules.
- 6) Public health emergencies.
- 7) Multiple health programmes and initiatives. The ANMs shared that whenever new programmes or initiatives are introduced not only does the entire priority shift towards the same but targets are set, at times without adequate exposure.
- 8) Community related factors like resistance, beliefs and negligence.
- 9) Political interference.
- 10) Other tasks (non-health related) like election duties, surveys etc.

2. ROLE OF DISTRICT HEALTH SERVICE SYSTEM IN EFFECTIVE FUNCTIONING OF FLHWs AND ASHAs

Across the three districts there were few common methods through which the district, sub-district and Mandal level administration can help FLHWs and ASHAs in functioning effectively. Three roles emerged commonly across the three districts.

- Work planning: There should be an appropriate and clear division of work with workplace support from supervisors and MOs. Emphasis should be on balanced team work.
- Supportive supervision (like in ATP preparation)
- PHC level planning and meetings: Through meetings like frequent convergence meetings between ICDS and health officials, case by case periodic follow ups through review and sector meetings. These meetings should be organised with bottoms up planning i.e. outputs from PHC level review meetings should serve as action points for sector, cluster level meetings and further going up to higher administration.

The SPHOs from Srikakulam and Chittoor suggested providing refresher trainings and detailed orientations about new health programmes and initiatives with technical clarity and hands on exposure.

In **Srikakulam**, the SPHOs suggested that the administration can play a key role in the effective functioning of FLHWs and ASHAs by increasing the incentives for ASHAs for activities undertaken by them and incentivising activities like Japanese Encephalitis (JE) survey, de-worming, certain surveys related with national health programmes etc, which currently are non-incentivised tasks.

In **Chittoor**, both the SPHOs were promoted to the SPHO cadre and were recently posted to the cluster. One of them posted in P.Kothakota was a MD in community medicine while the SPHO posted in Satyavedu was a gynaecologist. They mentioned certain key ways through which the administration could play a key role in the effective functioning of FLHWs and ASHAs. These are: 1) Paying salaries regularly to FLHWs and honorariums to ASHAs. 2) Building up worker level motivation through non-financial incentives (positive feedbacks, empathetic support). 3) Providing facilities at the SC with due consideration to families of FLHWs. 4) Mass scale community level mobilisation demanding quality health services.

In **Khammam**, the SPHOs shared that the administration could support FLHWs and ASHAs in the following ways. 1) Providing work place support; supervisors should be directed to support the work of the existing FLHW in case an ANM position is vacant. 2) Undertaking multiple levels of monitoring and supervision of activities. 3) Reviewing worker level performance with constructive feedback mechanism. 4) Enhancing programme ownership among workers.

3. SUGGESTIONS TO IMPROVE PERFORMANCE OF HEALTH WORKERS

The SPHOs are a special official cadre that oversees the health service system at the cluster level. Across the districts, SPHOs came with rich experience both by virtue of qualifications and practical exposure. They gave some very crucial suggestions with reference to improving the performance of health workers and ASHAs. Table 40 below summarises the same categorised broadly under the following headings, 1) Administrative 2) Incentives 3) Skills building 4) Service delivery 5) Supervision and monitoring 6) Infrastructure and logistics 7) Community related aspects 8) Work planning.

Table 40: Suggestions by SPHOs

ADMINISTRATIVE
<ul style="list-style-type: none"> • Filling up vacant positions • Grading PHCs* • Performance based time bound promotions especially for the female cadre • Regular meetings (review and monitoring) • Realistic work planning at the PHC level with participation of FLHWs, ASHAs, supervisors and MOs • Regularisation (2nd ANM, ASHAs) • Improvement in selection criteria with more emphasis on higher educational qualification for ANMs.
INCENTIVES
<ul style="list-style-type: none"> • Financial : Regular payment, increasing ASHA incentives and salaries for FLHWs • Non-financial: Motivating workers and bringing in 'employee satisfaction'.
SKILLS BUILDING
<ul style="list-style-type: none"> • Trainings and orientations (common across the three districts) <ul style="list-style-type: none"> – Hands on exposure – On job trainings – Refresher trainings – Supervisory cadre strengthening (trainings and higher educational qualifications).
SERVICE DELIVERY
<ul style="list-style-type: none"> • Improving field level outreach
SUPERVISION AND MONITORING
<ul style="list-style-type: none"> • Supportive supervision • Periodic monitoring • Improvement in quality of supervision.
INFRASTRUCTURE AND LOGISTICS
<ul style="list-style-type: none"> • Liveable facilities for ANMs in quarters (common across Srikakulam and Chittoor) • Improving transport mobility (in terms of availability to reach the field and the facility).

COMMUNITY RELATED ASPECTS
<ul style="list-style-type: none"> • Awareness building about government schemes • Increasing community driven demand by motivating the community.
WORK PLANNING**
<p>** As expressed, suggestions given above under various themes do impact work planning in various direct and indirect inter-related manner.</p>
<ul style="list-style-type: none"> • Clear division of workers between ANMs (1st and 2nd ANM), different cadre of FLHWs • Filling up of vacant positions along with a provision for additional staff in high load areas • Need to redefine population size and geographical territories for SCs and better provisioning of health facilities especially for remote inaccessible locations • Preparation of ATP with reference to community needs and priorities is a must. Periodic updation of the same should be done in order to keep it realistic. ATPs should be prepared with support from supervisors and there should be a periodic follow up on any deviations by supervisors

***Grading of PHCs:** The SPHO from the tribal PHC cluster, Srikakulam specifically emphasised on the grading of PHCs. As per his suggestion, each district should have a profile of all PHCs with population and geographical details. For example, there are a total of 75 PHCs in Srikakulam District. They all should be graded as Grade A, B and C. Grade A should comprise of PHCs from the plains (50%), Grade B should comprise of medium difficulty level PHCs (30%) and Grade C should comprise of PHCs from hard core difficult terrains (20%). Within Grade C there should be further gradations like C1, C2, C3 based on the area profile. He insisted that selection would be much easier if PHCs were divided on three criteria 1) Tribal population covered under the PHC. 2) Staff occupancy rate in the respective PHC. 3) Terrain type (hilly, plain or mixed). Promotion of the staff from Grade C to B to A should be entirely based on the respective health personnel's performance.

C. MEDICAL OFFICER (MO)

Medical Officers (MOs) across the six sample PHCs from the three districts were interviewed with respect to some key domains related with the functioning of FLHWs and ASHAs. A few key recommendations were also given by them based on their experience at the field level with FLHWs, ASHAs and their supervisors. Findings from the detailed qualitative interviews are presented below.

1. FUNCTIONING OF FLHWs and ASHAs

The MOs were asked about key factors which not only act as enabling factors but also as barriers to the effective functioning of ANMs, MPHWS-M and ASHAs at the field and facility level (Table 41). In the process, the significance of ASHAs in the district health system and health service delivery was also shared. Various aspects related with work planning and implementation emerged at various junctures during interviews, which have been dealt with separately as a sub-section in the findings presented below.

Table 41: Enabling factors and barriers to FLHWs and ASHAs

ENABLING FACTORS
<ul style="list-style-type: none">• Local residence of ANMs either in SC quarters or in the vicinity of SC• Co workers support through ASHAs and AWWs who act as a key source of information about beneficiaries and other crucial events• Preparing a monthly action plan• Community rapport because of affiliation to the same community• Regular review meetings where ANMs can express their challenges and devise solutions to mitigate the same
BARRIERS
<ul style="list-style-type: none">• Hierarchy between 1st and 2nd ANMs.*• Poor SC infrastructure with either lack of equipment or requiring maintenance. Lack of water and electricity. The lack of water makes it difficult to follow hygiene measures and conduct deliveries at the SC. Referrals are made directly to the PHC• Vacant positions and large population load• Vast number of simultaneously ongoing health programmes and initiatives add up to additional work load• Difficult travel mobility especially during the rainy season to the scattered habitations and locations in the interior **• No refresher trainings and low skill set of ASHAs• Political interference from local politicians• Language is a barrier especially when the tribal dialect is different from the local language (Telugu) and in the coastal villages of Borivanaka PHC (close to Orissa border)• Multiple reports and records which not only add to the high recording burden but also duplication of information. Many a times some forms are asked for on the spot with no guidance about details and procedures to fill up the same• Lack of community awareness (and support) because of illiteracy and belief in local traditions which at times can be fatal. Alcoholism in the community maybe a threat to worker’s security. Presence of RMPs also makes it difficult for villagers to trust FLHWs and ASHAs• Shortage of MPHWS-M which helps not only in task sharing but also caters to the MPHWS-M specific duties• Target based system which may not be the best fit for demographic specifications (size and need)• Low and irregular incentives to ASHAs which are insufficient for them to run the house in comparison with the amount of work expected and/or done• ASHAs illiteracy in certain areas makes it difficult for them to maintain field records

***Hierarchy between two ANMs:** The 2nd ANM is contractual and given less importance. but in most of the cases the 1st ANM leaves the work to the 2nd ANM, which leads to their demotivation. This also leads to a lack of coordination impacting service delivery. A clear work division is lacking between the two which also leads to work duplication in the field. The 2nd ANM often feels that she is burdened with all tasks including those of the 1st ANM.

****Difficult travel mobility:** In Srikakulam District, many of the village's tribal cluster PHC areas are located on top of a hill. There is no proper transportation facility to those locations. So ASHAs and ANMs have to travel by foot through the forests and farms carrying heavy equipment and kits. This leads to a loss of productivity of the worker. Likewise in the non tribal cluster PHC area, villages lie in a belt close to the sea with poor road connectivity during rains.

1.1 Significance of ASHAs in the district health system and health service delivery

It was clear that the ASHAs were of great support to the functioning of FLHWs in various ways listed below.

- 1) They act as an important link between the community and FLHWs. The ASHAs also provide vital information related with the community which is of larger significance to health services related work. For on time ANC registration, routine follow ups, identification of new cases of communicable diseases like TB etc., the ASHAs dynamic role is of great significance. She is in close link with the AWW from the village AWC. This link is very vital for nutrition related services and the larger goal of improved maternal and child health.
- 2) ASHAs make the community aware about health and hygiene related behaviour and mobilise them to avail services from the SC and through special days like immunisation, NHD etc. As they are from the same village awareness building and mobilisation becomes much smoother.
- 3) Since she lives in the village, during emergencies the ASHA is very instrumental in linking beneficiaries with the health worker and health services at the earliest.
- 4) She accompanies beneficiaries to the health facility which helps the patient and village community in linking up with the health facility.

1.2 Work planning and implementation

There are various factors which impact work planning, implementation and the consequential work load of FLHWs and ASHAs. Through TAM interviews with MOs an endeavour was made to get a better understanding of the same. Across the districts a list of factors emerged which impact work planning and implementation by frontline health functionaries:

- 1) Public health emergency situations like outbreaks wherein all the health priorities and manpower are diverted to curbing the same which results in compromising on other health related priorities.
- 2) Sudden administrative events like meetings, especially long ones, impact their routine work plan and tasks.
- 3) Socio-cultural events (like local festivals, marriage, death) at the village level makes villagers unavailable and thus activities like field outreach and medical camps are adversely impacted. Moreover, it is difficult for villagers to compromise on their daily livelihood in order to take time off to visit the health facility. The villagers go to agricultural fields in the morning and return only by afternoon.
- 4) A large amount of their time is consumed in travel especially within the field (more significant for remote inaccessible and tribal locations) and in to and from home. This certainly leaves FLHWs with very little time for actual service delivery. The situation is further complicated, as explained above, with unplanned sudden events, vacant positions and multiple tasks. A glaring example of this is the TS state wide *Mission Indhrdhanush* special survey drive (at the time of data collection in Khammam: September end to October first week). Additionally a strike by the ASHAs made the situation and task even more difficult.

2. SUGGESTIONS TO IMPROVE THE PERFORMANCE OF HEALTH WORKERS

Some very crucial suggestions emerged from MOs with reference to improving the performance of FLHWs and ASHAs. Table 42 below summarises the same broadly categorised under the following headings. 1) Administrative 2) Incentives 3) Skills building 4) Service delivery 5) Supervision and monitoring 6) Infrastructure and logistics 7) Community related aspects 8) Work planning.

Table 42: Suggestions by MOs

ADMINISTRATIVE
<ul style="list-style-type: none">• Fill up vacant positions• Regularisation of on-contract workers• Enhanced coordination between ANMs and AWWs (through meetings and with supervisory involvement)• Periodic review meetings with fixed duration in order to take stock of the situation• Regular performance based promotions• Allocating one MPHWM for each PHC
INCENTIVES
<ul style="list-style-type: none">• Financial:Payment of regular salaries• Non financial: Building up worker level motivation through appreciation, support and rewards/awards
SKILLS BUILDING
<ul style="list-style-type: none">• Refresher trainings and orientations for new health programmes and initiatives for FLHWs and ASHAs• Induction programmes with hands on exposure (for newly recruits)• Training for supervisors
RECORDS MAINTAINENCE
<ul style="list-style-type: none">• Minimising multiplicity of records and duplications
SUPERVISION AND MONITORING
<ul style="list-style-type: none">• Supportive supervision and periodic monitoring
INFRASTRUCTURE AND LOGISTICS
<ul style="list-style-type: none">• Fully equipped PHC and SCs• Providing transport facilities to FLHWs and ASHAs so that commuting within the field takes less time. In Srikakulam, it was suggested that ambulance facilities be provided at the PHC level• Providing accommodation and daily allowance facilities to ASHAs or ANMs accompanying beneficiaries
COMMUNITY RELATED ASPECTS
<ul style="list-style-type: none">• Building community awareness

D. HEALTH SUPERVISOR

1. FUNCTIONING OF FLHWs

Health supervisors were asked about key factors which impact the performance of ANMs and MPHWS-M at the work place (Table 43). Various aspects related with planning and implementation have been also presented as a subsection in the findings presented below.

Table 43: Factors impacting FLHWs functioning

SRIKAKULAM	CHITTOOR	KHAMMAM
<ul style="list-style-type: none">Lack of clarity in work division	<ul style="list-style-type: none">Stocks unavailability in terms of medicines	<ul style="list-style-type: none">Interference created by local political involvement
<ul style="list-style-type: none">Sudden unplanned meetings of long duration	<ul style="list-style-type: none">Poor infrastructure at SCs	<ul style="list-style-type: none">Records maintenance with the bulk of information sought and large number of registers
<ul style="list-style-type: none">Travel mobility especially while travelling to remote inaccessible locations In Srikakulam it was expressed that there is no vehicle at the PHC which makes it even more difficult In Khammam, carrying vaccine kits was found to be very difficult because of the lack of connectivity leading in turn to the wastage of time		
<ul style="list-style-type: none">Community related factors like resistance, negligence, lack of awareness and support. This makes follow up difficult		
<ul style="list-style-type: none">Delay in payment of regular salaries	<ul style="list-style-type: none">Lack of technical skills and appropriate information about newer programmes and initiatives	
<ul style="list-style-type: none">Illiteracy among ASHAs	None	<ul style="list-style-type: none">Contractual nature of employment of 2nd ANM which also adds to the hierarchy created between the 1st ANM who is permanent and 2nd ANM
<ul style="list-style-type: none">Vacant positions		

Coordination is an important aspect which impacts the functioning and overall management of time for FLHWs. Through interviews with health supervisors, who directly supervise ANMs, an attempt was made to explore the work coordination between ANMs, ASHAs and MPHWS-M in the health service delivery. The findings are presented in Table 44 under specific heads.

Table 44: Work coordination between ANMs, MPHWS-M and ASHAs

ANM coordination with ASHAs
<ul style="list-style-type: none">• Making referrals and accompanying patients• Mobilising beneficiaries for activities at the SC, special days like NHDs, Immunisation Days etc• Gathering information about prospective cases to be registered for e.g. ANC women
ANM coordination with MPHWS-M
<ul style="list-style-type: none">• Logistic support during camp days and special days like Immunisation Days, in carrying heavy vaccine kits• Support in service delivery<ul style="list-style-type: none">– In Srikakulam, MPHWS-M provide support on School Health Day in dealing with the health checkup of a large number of students– In Chittoor, the MPHWS-M takes the lead in addressing health and hygiene, water and sanitation related measures at the community level. The MPHWS-M is also helpful in catering to a large number of positive cases during epidemics– In Khammam, the ANM shared that the MPHWS-M can be helpful in giving health education related with family planning services to the male members of the village community. Their presence can also be helpful in conducting rapid field surveys. He can also help in a well coordinated response during epidemics• Accompanying the ANMs especially to remote inaccessible locations and also serving as a safeguard mechanism for ANMs

There are certain crucial factors which impact the regular work planning and consequential work load of FLHWS. The findings from the health supervisors of the three districts are presented below (Table 45).

Table 45: Factors impacting regular work planning and work load of FLHWS

SRIKAKULAM	CHITTOOR	KHAMMAM
Administrative events like meetings and trainings which are sudden and of along duration.		
Local factors related with the community like any festival, marriage or death.		
Records maintenance take a lot of time because of the number of registers and information sought.	Newer government health programmes and initiatives keep adding to existing job responsibilities with the situation at the systemic level remaining unchanged.	
	Accompanying beneficiaries to the health facility impacts other work tasks and this becomes even more important if positions are vacant or other worker(s) are unavailable for other reasons.	Non health but work related tasks like election duties, surveys etc., which are mandatory but also make FLHWS compromise on their work tasks as per the work plan.
	Unavailability of villagers during SC service delivery hours because they work in agricultural fields. This calls for follow up of missed cases which does impact the FLHWS work plan.	Vacant positions result in additional work load for the workers along with frequent multi-tasking.
		Public health emergency situations like epidemics.

Health supervisors also shared the various mechanisms used by them in order to ensure effective overall functioning of health workers. Some key aspects that emerged are as follows:

- 1) Regular on site monitoring and supportive supervision of FLHWs (in terms of problem solving, conflict resolutions, technical know-how, clarity of information etc).
- 2) Motivating and appreciating workers.
- 3) Well defined delegation of tasks to respective workers with no/minimal duplication and follow ups on action plans.
- 4) Verifying records in order to assess the situations and authenticity of aspects related with service delivery.
- 5) Community involvement in order to enhance support and maximise service delivery.

2. SUGGESTIONS TO IMPROVE WORK PERFORMANCE OF HEALTH WORKERS

Health supervisors are responsible for the direct supervision of FLHWs. Across the districts some very crucial recommendations emerged from health supervisors for improving the health workers work performance. Table 46 below summarises these broadly categorised under the following headings.1) Administrative 2) Work planning 3) Incentives 4) Skill building 5) Infrastructure and logistics.

Table 46: Suggestions by Health Supervisors

ADMINISTRATIVE
<ul style="list-style-type: none">• Information about meetings schedules should be given well in advance and their time duration should be restricted• Regularisation of contractual workers• Communication allowances should be provided to FLHWs and ASHAs• Stationery costs incurred by ANMs should be compensated• Enhancedconvergence between health and ICDS/WDCW Departments both at the grassroots and higher levels (officials and supervisors) and ASHAs• Remove thetarget based system for FLHWs and devise population need and size specific targets• Fill up vacant positions which will also reduce population load on SCs and PHCs
WORK PLANNING
<ul style="list-style-type: none">• Reduce multi-tasking with clear division of responsibilities and formulation of work plan. The ANM should be doing tasks as per her job description and not those of another cadre.
INCENTIVES
<ul style="list-style-type: none">• Financial: Pay salaries regularly and on time• Non-financial: Award/reward best performing FLHWs and ASHAs at the Mandal level

SKILLS BUILDING

- Training programmes to build technical skills

INFRASTRUCTURE AND LOGISTICS

- Improved transport mobility for workers with a vehicle at the PHC. In Srikakulam, a specific need was expressed for the provision of an ambulance at the PHC level because of remote inaccessible locations which the PHC services
- Regular stocks supply and availability of drugs
- Improving infrastructure at the PHC and SC not only in terms of maintenance but also providing equipment/kits etc as required. In Chittoor, it was expressed that the SCs need upgradation in terms of available facilities (including water and electricity) and furniture like examination tables
- Provision for accommodation facilities for health workers accompanying beneficiaries

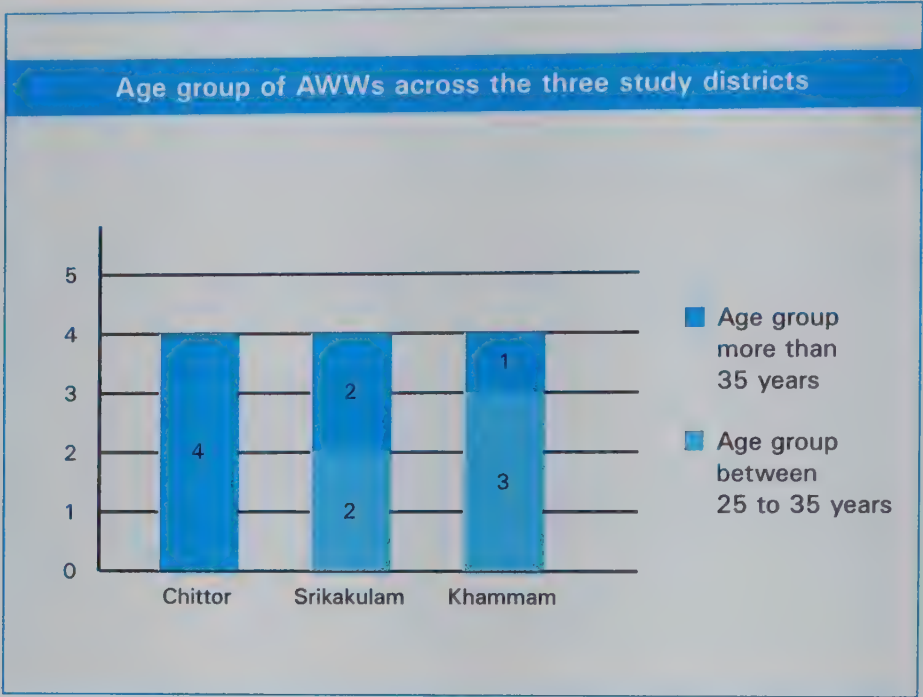
5E. AWW FINDINGS

I. SOCIO-DEMOGRAPHIC INFORMATION

1. AGE GROUP

Three of the 12 AWWs were aged above 45 years; four were aged between 35-45 years while five were aged 30 years (Figure 22).

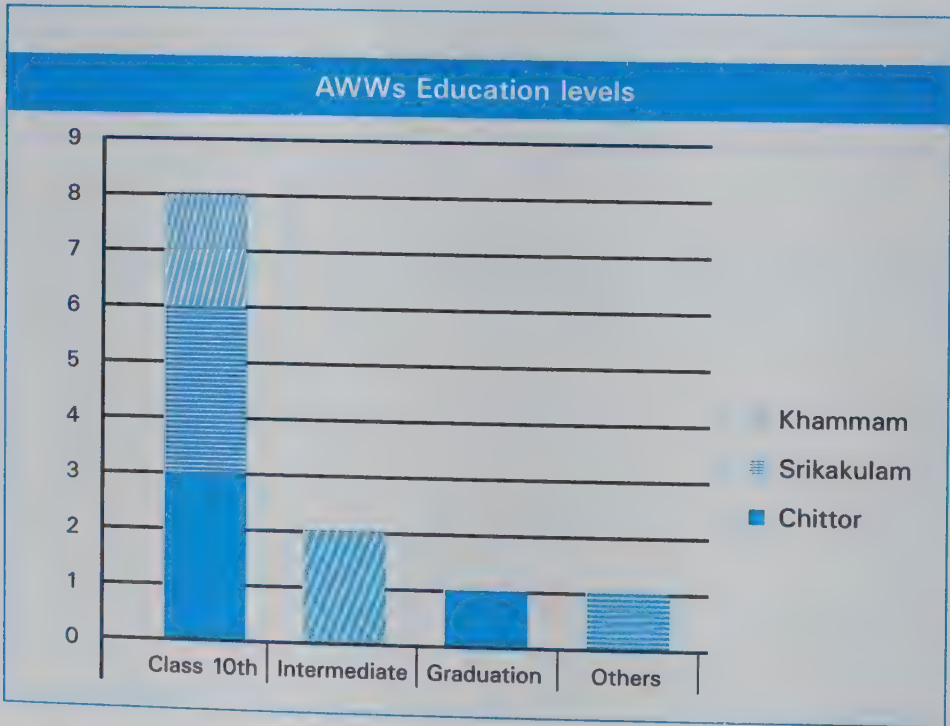
Figure 22: Age group of AWWs across the three study districts



2. EDUCATION LEVEL

Details of the AWWs education level are represented in Figure 23. Only one AWW had not cleared high school. Out of the 12 AWWs, only two had received computer training (one each from Srikakulam and Khammam).

Figure 23: Education levels of AWWs from the three districts



3. FAMILY TYPE AND MARITAL STATUS

Out of 12 AWWs, 11 were married while one was divorced. Ten AWWs were living in a nuclear family while one each from Chittoor and Khammam were living in a joint family.

4. PLACE OF RESIDENCE AND MODE OF TRANSPORTATION

Ten AWWs resided in the same village and walked to the AWC while two AWWs, one each from Srikakulam and Chittoor, travelled from a nearby village by bus to the AWC.

II. TIME UTILISATION BY AWWs WITH FACILITATING FACTORS AND BARRIERS TO TIME MANAGEMENT

A total of 12 AWWs (two from each of the clusters in a district) were observed for a span of six days (Monday to Saturday). Four AWWs were from tribal and eight from non-tribal clusters. Total 70 AWW days were observed.

Details of findings as emerged through TAM observations are presented below for the AWW cadre across the days of the week. Distinction between AWWs from tribal and non-tribal cluster AWCs has not been done because of a smaller sample size. Time is represented through range, median, IQR and total time per week per AWW.

1. TOTAL TIME SPENT ON JOB AND TRAVEL

AWWs spent median 6:50 hours (IQR, 6:14 – 8:06) on job during 70 AWW observation days and median 0:17 hours (IQR, 0:08 – 0:50) were spent in travel from home to AWC and return. Within the field travel was negligible. The CDPOs, in their interview also shared that AWWs do not prioritise home visits and that was an area largely lacking in the AWWs daily activities.

Two AWWs were staying in a different village from where the AWC was located. This increased their home to AWC and return travel time on a per day basis. Within the field travel was mostly done by Anganwadi helpers. There were two AWWs from the hilly area, but the helper usually travelled uphill to distribute supplementary nutrition and carry home rations to beneficiaries who had missed the service.

2. TIME SPENT IN A WEEK ON VARIOUS CATEGORIES AND SUBCATEGORIES OF ACTIVITIES

Tables 47 and 48 (and Figure 24 and 25) below show the time spent in the various broad and subcategories of activities by AWWs in total and across weekdays. Activities have been identified as programmatic activities, programme supportive and others. The AWWs lunch breaks were not well defined and were often clubbed with field or centre level activities, or personal work, thus they are not separately mentioned.

Programmatic activities: AWWs spent median 1256 minutes on programmatic component of activities. Average time spent per AWW per week was 1234 minutes (minimum 517 minutes and maximum 1797 minutes in a week) which is about 56 per cent of the average total time on the AWWs job in a week. On an average an AWW spent 959 minutes in a week on direct service to beneficiaries, 183 minutes on records and reports maintenance and 102 minutes on field travel (Table 47).

Direct service to beneficiary: Based on an AWWs job description and actual field experience, an observation schema was devised which observed time utilisation of AWWs across sub-categories as listed in Table 48.

As revealed AWWs provided only two activities for more than 90 per cent of their time spent on direct service to beneficiaries - early childhood education (ECCE) and pre-school NFE (median, 678 minutes), and supplementary nutrition programme (median, 185 minutes). However,

observers reported that though ECCE/NFE consumed the maximum time but the quality of the service was uncertain. In a few of the AWCs, ECCE/NFE has been mainly restricted to a few action songs which very few children actually follow. One AWW was observed to be involved in school health activities along with the ANM on a Friday.

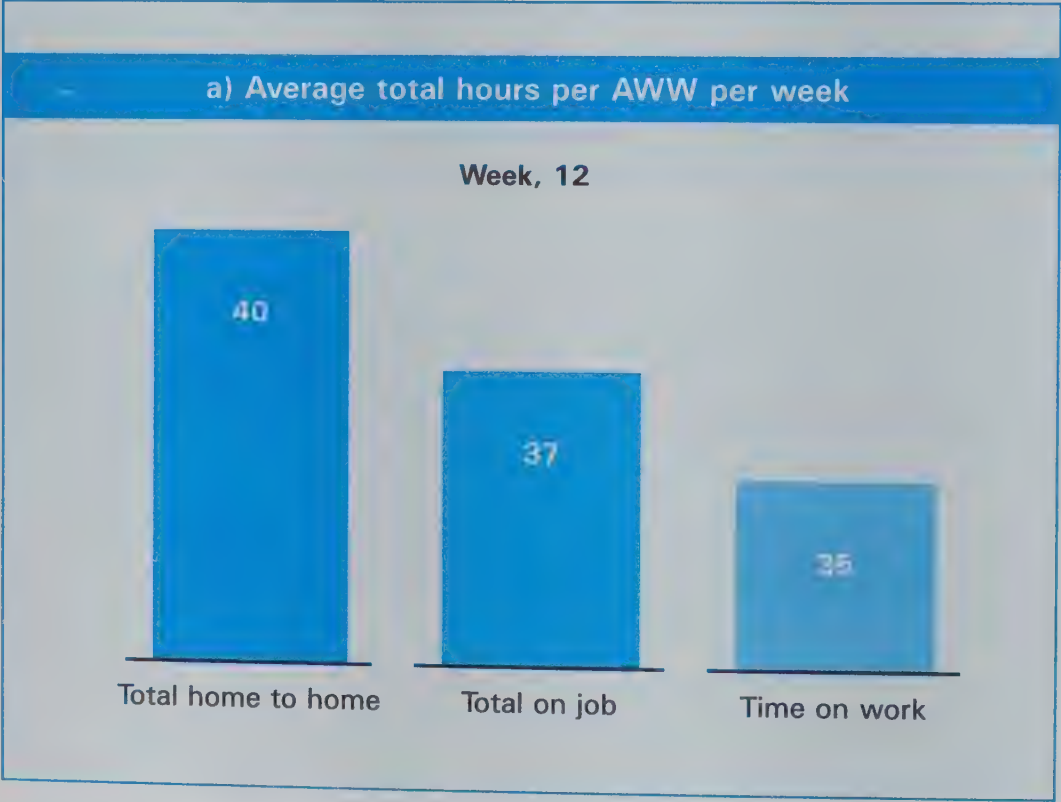
Records and reports: Almost all of the AWWs time within this sub category was spent on maintaining registers in a week (median 139 minutes). It was observed that AWWs maintained at least 13 basic registers along with other less significant registers. Like workers from the health department, here as well, very little time was spent in maintaining beneficiary records which is important for routine follow ups and keeping track of the health and nutrition related status of beneficiaries from the community.

Programmatic support activities: Median time spent by AWWs on programmatic support activities was 376 minutes. On an average AWWs spent 397 minutes (minimum of 145 minutes and a maximum 753 minutes) in a week on programmatic activities, which is about 17 per cent of the average total time of an AWWs job in a week.

Other work: Much of the AWWs time was spent in the category of 'others' (median 498 min). An average of 568 minutes (26% of the average total time on job) was recorded per week per AWW with a minimum of 248 minutes and a maximum of 920 minutes. As it can be seen in Table 47, the AWWs spent an average of 197 minutes per week in waiting, contributing to time spent on 'others'. AWWs expressed that waiting time was an impediment, *'Since parents of the children go to agricultural field for work so either they are unable to drop their children or if at all they come it is very late. Likewise, women beneficiaries also come late as per their convenience to collect take home ration which overall does add up to waiting time of AWWs.'*

The AWWs spent a lot of time on personal work and other uncategorised work which could be utilised on services to beneficiaries or records maintenance.

Figure 24: Time spent by AWW from home to home, on job and on designated work in hours



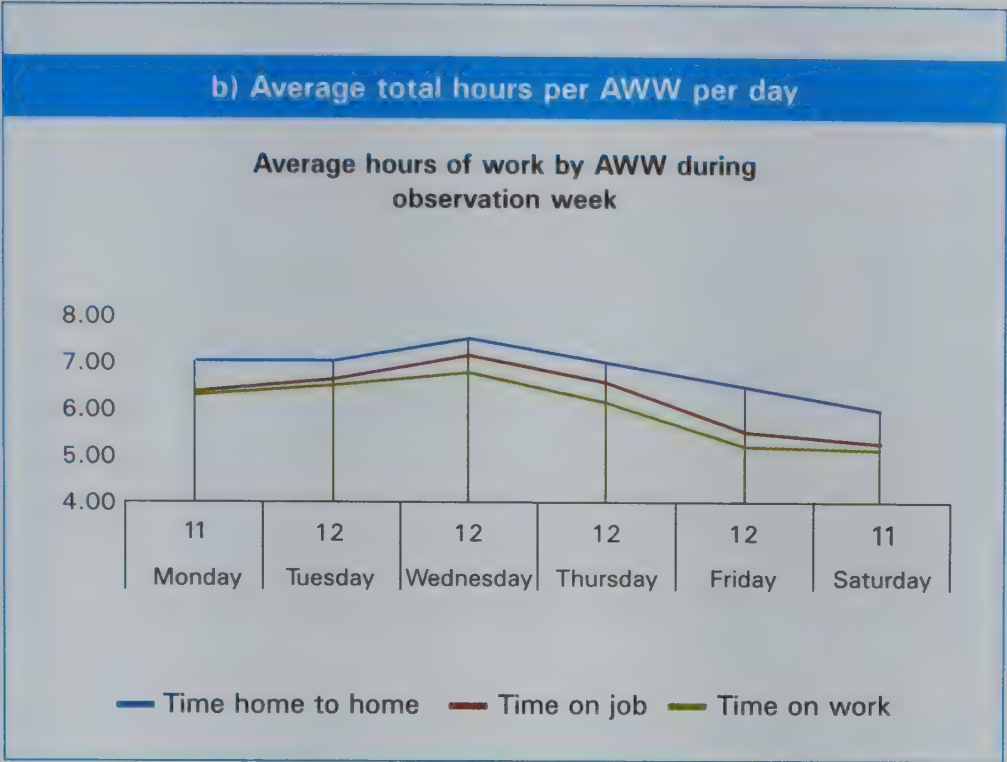


Figure 25: Number of AWWs and total time spent with respect to category and sub category of activities

AWW

Activities in categories and subcategories

Number of AWWs working during the week and respective days; max bar height is 12

Total time spent by AWWs during the week and respective days; max bar height for week column is 257 hours; for days it is 50 hours



AWW spent median 6:50 hours (IQR, 6:14 – 8:06) on job during 70 AWW observation days. They spent minimal time on within field travel.

AWWs spent about 56% of their total on job time on programmatic activities in a week, 17% on programme support activities and 26% on other activities.

Within programmatic direct service delivery was done more on Tuesdays, Wednesdays and Thursdays while time spent on records maintenance was minimal.

AWWs spent almost all their service delivery time on Early Childhood Education (ECE) / Pre-school non-formal education (NFW) and supplementary nutrition. One AWW was involved in school health activities too. A few ANMs did house visits however time spent in these was very minimal.

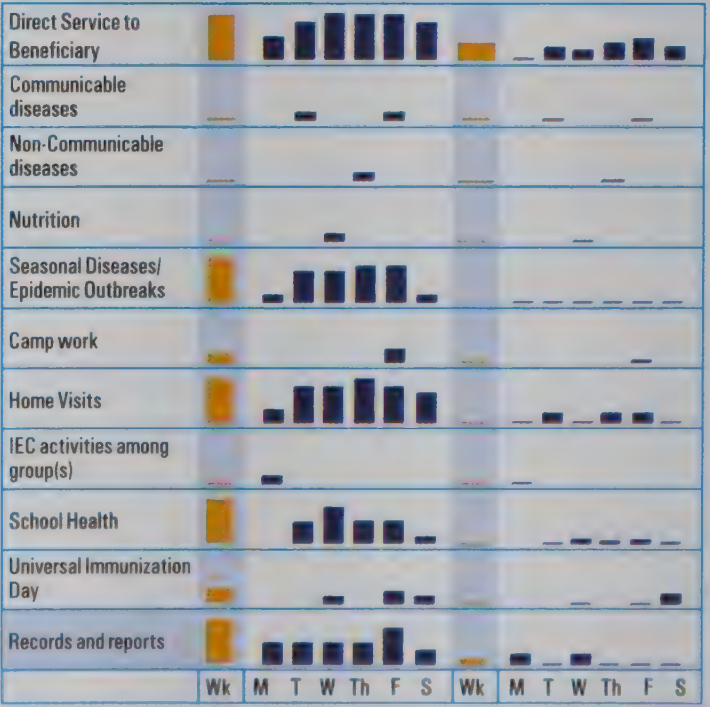


Table 47: Activities under broad categories as performed by AWWs across the six days of the week, N = 12 (The table gives number of AWWs performing the respective activity on respective day of the week)

Particulars	Total/week, N = 12						Monday N = 11		Tuesday N = 12		Wednesday N = 12		Thursday N = 12		Friday N = 12		Saturday N = 11	
	count	Min	Max	Median	Total / week /	AWW	Count	Median	Count	Median	Count	Median	Count	Median	Count	Median	Count	Median
Programmatic	12	517	1797	1256	1234		10	210	11	308	11	282	11	222	10	202	11	230
Direct services to beneficiary	12	386	1570	956	959		10	151	11	246	11	165	11	200	9	159	10	133
Records and reports	12	52	332	159	183		10	17	11	12	11	30	10	21	9	11	11	46
Travel to and within field	11	0	291	44	102		3	0	4	0	5	0	7	10	4	0	5	0
Programmatic support	12	145	753	376	397		11	38	12	25	11	36	11	49	12	69	11	64
Trainings	1	0	7	0	7		1	0	0	0	0	0	0	0	0	0	0	0
Meetings/ Discussions with co workers or village community	8	0	267	107	132		7	11	8	7	7	3	8	10	7	4	8	10
Meetings/ Discussions with seniors	5	0	307	0	172		4	0	3	0	4	0	3	0	5	0	3	0
Other work related activities (Apart from AWW core work)	1	0	2	0	2		1	0	0	0	0	0	0	0	0	0	0	0
Administrative work	12	5	137	52	58		7	8	9	7	9	12	10	10	9	6	8	4
Other work	12	248	920	498	568		11	93	12	76	12	111	12	102	12	83	11	70
Waiting	12	54	388	163	197		9	31	10	27	10	30	10	18	9	17	10	21
Miscellaneous: Personal work	12	11	490	134	190		11	20	10	22	11	44	10	22	9	7	8	11
Others/Null entries/Uncategorised	8	0	606	22	271		5	0	6	12	6	3	6	7	6	4	2	0
On job Total	12	1604	2550	2297	2199		11	389	12	415	12	421	12	406	12	382	11	408
Travel home to centre and return to home	12	30	449	188	202		10	44	12	18	11	15	11	12	11	34	9	16
Grand Total (home to home)	12	1890	2833	2530	2401		11	440	12	433	12	448	12	435	12	428	11	416

8: Sub categories of programmatic activities performed by AWWs across the days of the week, N = 12 (in minutes)

The table gives number of AWWs performing the respective activity on respective day of the week

Particulars	Total/week, N = 12					Monday N = 11		Tuesday N = 12		Wednesday N = 12		Thursday N = 12		Friday N = 12		Saturday N = 11	
	Count	Min	Max	Median	Total / week / AWW	Count	Median	Count	Median	Count	Median	Count	Median	Count	Median	Count	Median
Direct services to beneficiary	12	386	1570	956	959	10	151	11	246	11	165	11	200	9	159	10	133
Child health nutrition (monitoring)	3	0	16	0	7	0	0	1	0	1	0	0	0	2	0	0	0
Early Childhood Education (ECCE)/Pre-school non-formal education (NFE)	12	271	1262	678	703	10	121	11	187	10	132	11	127	8	73	9	91
Health services with AWW as facilitator	4	0	73	0	24	1	0	0	0	2	0	0	0	0	0	2	0
Supplementary nutrition program (SNP)	12	45	330	185	188	9	25	9	38	10	42	8	41	8	14	9	42
Home visits	9	0	294	14	59	2	0	3	0	3	0	4	0	3	0	4	0
IEC activities among group(s)	2	0	23	0	14	0	0	1	0	0	0	0	0	1	0	0	0
Nutrition and Health Day (NHD 1 & 2)	4	0	70	0	35	1	0	0	0	1	0	1	0	0	0	2	0
Others	1	0	2	0	2	1	0	0	0	0	0	0	0	0	0	0	0
School Health*	1	0	50	0	50	0	0	0	0	0	0	0	0	1	0	0	0
Records and reports	12	11	490	134	190	11	20	10	22	11	44	10	22	9	7	8	11
Beneficiary records	4	0	10	0	6	0	0	1	0	0	0	0	0	1	0	2	0
Registers	12	52	332	139	164	10	17	11	12	11	25	10	15	9	11	11	19
Reports	1	0	106	0	106	0	0	0	0	0	0	1	0	0	0	1	0
Others	4	0	54	0	23	1	0	1	0	1	0	0	0	0	0	1	0
Travel to and within field	11	0	291	44	102	3	0	4	0	5	0	7	10	4	0	5	0

3. DAILY WORK FUNCTIONING

3.1 Facilitative factors for AWWs in accomplishing daily work tasks

Five key factors were identified through interviews with AWWs as facilitative to their functioning. These are 1) Community support 2) Co workers support 3) Family support 4) Worker motivation 5) Stocks supply (Table 49).

It emerged through analysis that for the smooth functioning of AWWs, the most important perceived facilitative factor was community support. It was reflected in various ways like through village groups, from beneficiaries, active participation of parents etc. The **AWW, Srikakulam** and **AWW, Chittoor** voiced similar opinions, *'Support received from children's mother is greatly helpful because she is able to understand her child better.'*

The **AWW, Khammam** brought to notice many aspects related with community support. She said,

Mothers in the village help in bringing the children on time, in neat condition and send water bottles with them. Some donors like ward members have supported AWC activities by donating water filters and play school materials. A few of the parents have also donated materials like plates, glasses etc. Beneficiaries also co-operate by not going to the private centres. However, support from the gram panchayat is largely lacking.

As observed by the field data collection team, co workers support was of great significance to the functioning of AWWs. The AWH helped in managing children and other logistic work at the AWC like cooking, handling ration stocks, cleaning etc. She played a significant role when the AWW had to go for a meeting or was absent for personal reasons. The AWHs presence ensured that the AWC remains open and beneficiaries are able to receive supplementary nutrition (SNP) and take home ration (THR). The ASHA was helpful because she was from the same village and in close touch with the community. She helped the AWW in identifying prospective beneficiaries and cases which required intervention. The AWW Khammam shared *'Supervisors and other AWWs of the surrounding AWCs help her by clearing the doubts regarding the work. I do not hesitate in calling them whenever I have doubts. They are very supportive.'*

Family support was also considered important mainly in terms of the support received from the spouse and mother-in-law where AWWs were living in a joint family. The **AWW Chittoor** shared the importance of encouragement received from her supervisor and CDPO which in turn helped her in being motivated about the work. The **AWW Khammam** shared *'Appreciation from the community about my work makes me serve them even better.'*

Table 49: Facilitative factors for AWWs

Item	Smith's S
1. INTERPERSONAL FACTORS AND COMMUNITY RELATED	
Community support	0.653
Co workers support	0.479
Family support	0.250

Worker motivation	0.160
1. a) OTHERS	
School support	
2. SYSTEM RELATED FACTORS	
Stocks supply	0.056
2. a) OTHERS	
Records maintenance, Work planning, Trainings	
3. OTHER FACTORS	
Location of residence	
REFERENCE TO PHRASES USED	
<ul style="list-style-type: none"> • Community support implied support received from village groups, beneficiaries, active participation of parents, village leaders etc • Co workers support: in terms of support received from ANMs, ASHAs, AWH, supervisors and CDPO • Family support: mainly received from spouse and other family members. AWW, Khammam shared that her husband helps her reach the AWC on time by dropping her at the AWC • Worker motivation: implies that the worker's self-motivation is boosted because of appreciation and encouragement received from seniors and the community • Stocks supply: An AWW shared that receiving stock materials like ration etc. on time enables them to ensure smooth SNP and THR services • Records maintenance: AWWs shared that periodically updating records enables them to keep track of beneficiaries and follow ups and cover the drop out cases • Work planning: The AWW from Khammam specifically said that by following the time table they were able to perform all the tasks on time. The time table is received from the higher authorities and they follow that on a daily basis • Location of residence: AWW, Srikakulam shared that because of the proximity of her home to the AWC it helped in saving time and reaching the centre on time 	

3.1.1 Coordination between with ANMs and ASHAs

Ten AWWs shared that they had common meetings with ANMs and ASHAs though the frequency of occurrence was not mentioned. One AWW said no to the occurrence of such meetings and one worker did not respond. In the interviews with the officials it clearly emerged

that formal meetings between grassroots workers from the health department and ICDS Scheme are less often, but these workers do interact informally for preparing for special days like NHD, Immunisation Day etc.

3.1.2 Work planning by AWWs

In reply to close ended questions, 11 AWWs reported to have a monthly action plan while one said she had no such plan. Out of these AWWs (11), nine were able to always follow their plan while two could do it often but not always. However, AWWs also mentioned that they receive the time table with defined activities (as popularly called) from seniors and they follow those in the field.

3.1.3 Worker motivation and awards/rewards to AWWs

Out of a total of 12 AWWs, only five spoke about receiving any awards/rewards for the good work they had done.

3.2 Challenges for AWWs in accomplishing daily work tasks

The key factors identified as challenges in accomplishing daily work tasks were 1) Infrastructure 2) Other tasks 3) Records maintenance 4) Community support 5) Co workers support (Table 50).

Infrastructure clearly emerged as the most important challenge for AWWs across all six AWCs in the three districts. Because of limited space available at the AWC, service delivery to beneficiaries and making seating arrangements for children was an issue. An AWW from Srikakulam said *'There is no playground available for children to play. Conducting outdoor games is difficult'*. Another AWW from Srikakulam shared *'Cooking is a problem because of less space'*. An AWW from Chittoor mentioned *'There are no toilets and power supply at AWCs'*.

An AWW from Chittoor pointed out an important aspect related with infrastructure and storage. She said *'The stock room at the AWC is not good so it is difficult to store the stock. The AWC surroundings are also not clean. The SC is also running in the same building which makes functioning even more difficult'*. An AWW from Khammam shared a very significant aspect with respect to toilets and children who come to the centre. She said *'Baby toilets are not in a good condition. Upon requesting and even on submitting all the required reports they say there are no funds and they do not give any funds'*.

There were a few more crucial issues in reference with infrastructure like maintenance of old AWC buildings, lack of water supply, availability of gas connection etc.

Table 50: Challenges faced by AWWs in smoothly carrying out daily tasks

Item	Smith's S
1. SYSTEM RELATED FACTORS	
Infrastructure	0.519
Other tasks	0.250
Records maintenance	0.181
1. a) OTHERS	

Stocks supply,	
Unavailability of IEC materials,	
Meetings,	
Non-payment of salaries on time	
Additional charges,	
Numerous government schemes	
2. INTERPERSONAL FACTORS AND COMMUNITY RELATED	
Community support	0.171
Co workers support	0.049
2. b) OTHERS	
Physical health	
3. OTHER FACTORS	
Climate	
REFERENCE TO PHRASES USED	
<ul style="list-style-type: none"> • Community support: Dealing with difficult to handle children, unavailability of beneficiaries, and local socio-cultural practices like child marriage were challenges faced by the AWWs • Co workers support: The AWW from Srikakulam expressed that because the helper is old and there is no other alternative, functioning on a daily basis is challenging for her. The helper is unable to reach out in the field to distribute food to missed/absent beneficiaries because of his old age. The AWW has to do these activities because of which the activities at the AWC have to be stopped during the period when she goes out to field for SNP and THR distribution • Other tasks: Other tasks outside the purview of regular duties but related to election duties, surveys etc • Records maintenance was a challenge because of the large number of registers to be maintained and periodic notices/ reminders from seniors for their submission. The AWWs expressed that they donot have enough training to fill the variety of registers and reports they are given. Moreover, there is a duplication of information which takes up a lot of their time • Stocks supply: The AWWs said stocks arrive at different times and that is a challenge. For example, pulses may be deliveredat one time, oil at another and rice on some other day. This makes it difficult to give beneficiaries the complete ration and food at the same time • Unavailability of IEC materials: AWWs said the lack of IEC material makes it is difficult for them to spread community awareness and conduct ECCE • Meetings: Sudden, often unannounced long meetings hamper their day's work • Additional charges: An AWW from Khammam shared that she holds charge of another centre. Visiting the centre to provide services pose a problem for her in terms of managing her own centre • Numerous government schemes: AWWs said that over time many new government schemes have been introduced, about which they themselves lack complete information. AWWs from the tribal PHC of Srikakulam, governed by ITDA, mentioned that beneficiaries often compare services given under ICDS through AWCs and those under ITDA. This creates confusion among them as well • Climate was a challenge mainly during field level outreach for house visits. Excessive rains and hot sunny afternoons prevented AWWs from effectively reaching out to the field on a daily basis. Coupled with physical health it became even more challenging for AWWs to function on a daily basis 	

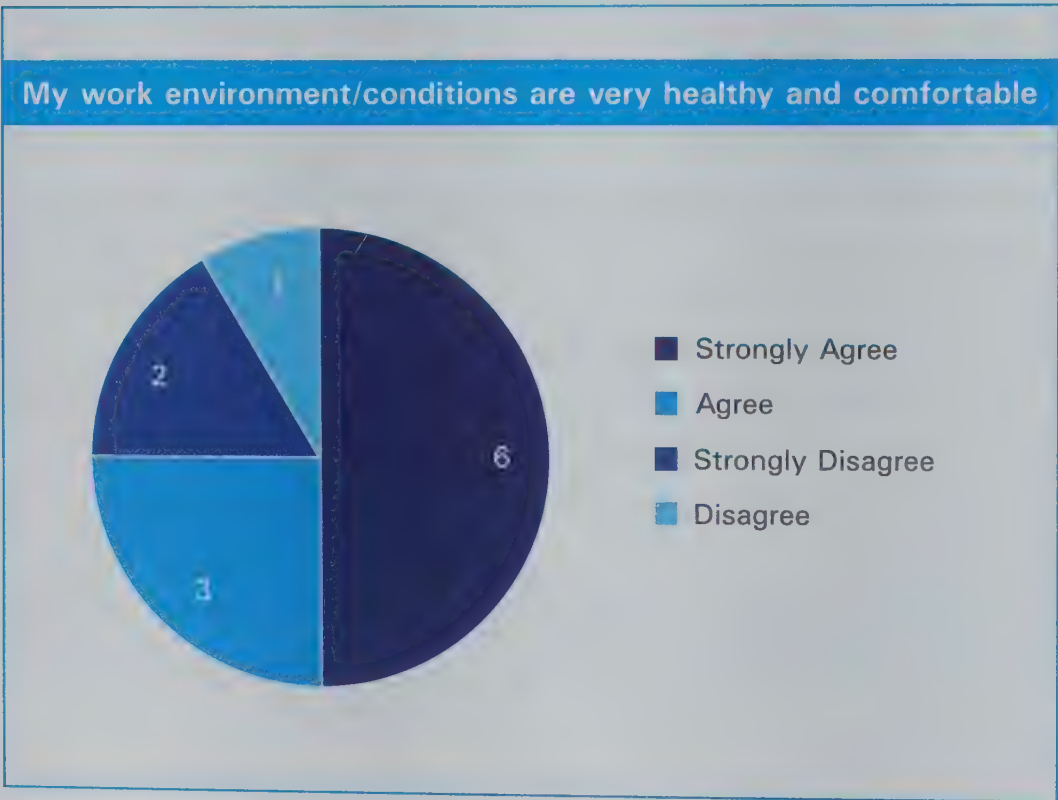
3.3 Work environment and job satisfaction

Nine of the 12 AWWs were satisfied with their jobs (Figure 26). When this was seen in the context of the work environment, nine AWWs found it healthy and comfortable (Figure 27).

Figure 26: AWWs job satisfaction



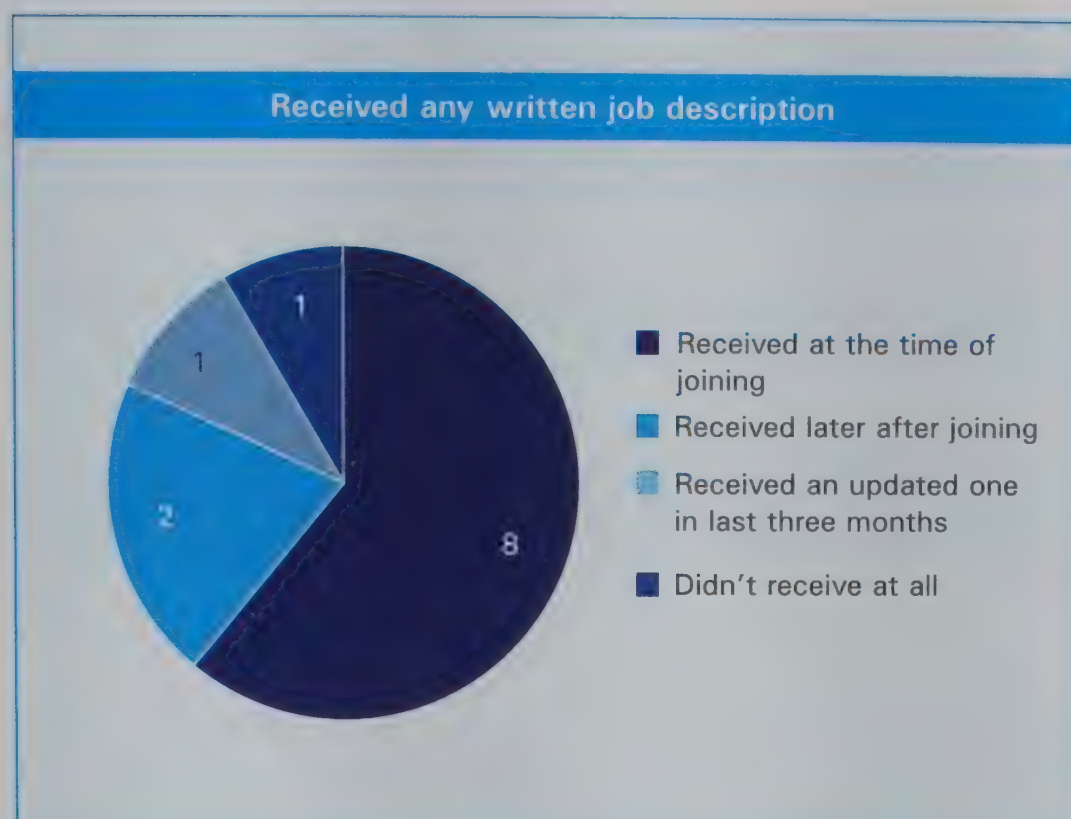
Figure 27: Work environment conditions



3.4 AWWs work and job description

Eight AWWs said that they had been given the job description at the time of joining while two received it after joining. Two AWWs reported to have received no job description at all (Figure 28).

Figure 28: AWWs receiving job description



4. TIME MANAGEMENT AND WORK PLANNING

4.1 Factors facilitating effective management of time by AWWs

The AWWs identified some key factors which facilitate management of their time 1) Community support 2) Co workers support 3) Family support 4) Location of residence 5) Work planning (Table 51).

Community support emerged as the most vital factor which facilitates effective management of time. An **AWW from Chittoor** shared '*Villagers support in bringing the children to AWC*'. This saves her time otherwise spent in persuading children and making home-to-home visits to call the children. Co workers support came across strongly in all the three districts. Each of the 12 AWWs clearly accepted the support provided by the helper in their work especially when the AWW had to go for meetings or was absent. An **AWW from Khammam** mentioned the support received from ASHAs in accomplishing the work. There were a few other factors as well which facilitated effective management of time by AWWs (Table 51).

Table 51: Factors which facilitate effective management of time by AWWs

Item	Smith's S
1. INTERPERSONAL FACTORS AND COMMUNITY RELATED	
Community support	0.386
Co workers support	0.439
Family support	0.318
1. a) OTHERS	

Worker self-motivation	
School support	
2. SYSTEM RELATED FACTORS	
Work planning	0.114
2. a) OTHERS	
Stocks supply	
3. OTHER FACTORS	
Location of residence	0.242
Clean work atmosphere	
REFERENCE TO PHRASES USED	
<ul style="list-style-type: none"> • Community support: received from the beneficiaries, parents of children, village leaders etc • Co worker support: received mainly from helper/<i>aaya</i> and ASHA • Family support: received mainly from spouse and other family members in the case of joint families • Worker self-motivation: Appreciations received from the community and encouragement from supervisors. AWWs shared that this motivates them further to do their work, plan, prioritise and execute their tasks • School support: received from school teachers and management in order to spread awareness and mobilise school students for health and nutrition related events. AWWs also receive support from schools in preparing the beneficiary list • Work planning: AWWs shared that the time table received from the seniors helps them to identify their tasks, prioritise them and execute them based on field requirements • Stocks supply: Regular supply of stock material like pulses, rice, vegetables, and other food items enables them perform the SNP and THR activities smoothly • Location of residence: AWW said that proximity of their house to the AWC saves time in travel and in reaching out to beneficiaries even during emergencies • Clean work atmosphere: One AWW from Khammam shared that clean and hygienic working atmosphere was important 	

4.2 Factors which pose a challenge in effective management of time by AWWs

During the interview AWWs spoke about factors which make the effective management of their time challenging. Five major factors were identified based on the analysis of the interviews, 1) Other tasks 2) Records 3) Sudden unannounced meetings 4) Poor infrastructure 5) Beneficiary unavailability (Table 52).

Through interviews other tasks emerged as most important perceived factor which impacted effective utilisation of time by AWWs. An **AWW from Srikakulam** articulated '*Involving us in other department activities like household surveys, ASHA day meetings, BLO meetings impact our own work here at AWC*'. Maintaining records emerged as another major challenge. An **AWW from Srikakulam** mentioned '*Immediate meetings are called for reports. If report is not*

finished on a particular day then next day we are again called for the meeting’. An **AWW** from **Chittoor** brought forth a crucial aspect of the large number of registers to be completed with duplication of information. An **AWW** from **Khammam** reiterated what the AWW, Chittoor mentioned ‘Sometimes we are asked to update certain records at very short notice and we end up spending more time on records’. Sudden unannounced long meetings, poor infrastructure and beneficiary unavailability were also some of the significant challenges impacting time management by AWWs.

Table 52: Factors which pose a challenge in effective management of time by AWWs

Item	Smith's S
1. SYSTEM RELATED FACTORS	
Other tasks	0.285
Records maintenance	0.236
Meetings	0.181
Infrastructure	0.194
1. a) OTHERS	
Stocks supply, Trainings, Multi-tasking, Lack of teaching aids	
2. INTERPERSONAL FACTORS AND COMMUNITY RELATED	
Community support	0.125
2. a) OTHERS	
Physical health	
3. OTHER FACTORS	
Strikes, Local festivals, Climate	
REFERENCE TO PHRASES USED	

- **Other tasks:** AWWs expressed that the tasks other than their core work like election duties, surveys, immunisation drives etc were a challenge to time management. At the time of data collection, in Khammam, a large scale survey was going on related to *Mission Indhradhanush* which was found to be a challenge to time management
- **Records maintenance** was a challenge in terms of the large number of registers, and unfamiliar formats (for newer kinds of records/reports introduced)
- **Meetings:** Often unannounced and of long duration which impacted the AWWs day plan. In order to attend meeting she had to either keep the centre closed or the AWH had to take care of SNP and THR activities for the day
- **Infrastructure** was a challenge because of lack of toilets, properly maintained buildings, lack of a stock room, lack of proper equipment like growth monitoring scale, a dysfunctional cook stove etc
- **Stocks supply:** Irregular supply of stocks was reported in the tribal AWCs of Srikakulam. Stock materials arrived at different times because of which smooth execution of SNP and THR activities was not possible. Certain times the villagers also got annoyed because they were unable to give food to the children,
- **Trainings:** AWWs mentioned the lack of periodic trainings. They faced challenges in the technical aspects of their work like filling up of various kinds of records, growth monitoring and plotting of charts etc. The ANMs also asked for training in how to conduct ECCE activities using modules and teaching aids
- **Multi-tasking** not only divided the AWWs focus on activities but also increased her time utilisation with reference to any particular activity. As observed, the AWWs had to cater to children, their parents and also complete records. The AWWs clearly said that because of the number of government schemes and added responsibilities their actual time is divided
- **Lack of teaching aids** posed a challenge for conducting ECCE activities
- **Community support:** was a challenge in terms of unavailability of beneficiaries because they were busy with agricultural work and unable to come to the AWC. This was even more pronounced for AWCs located in tribal hilly region of Srikakulam
- **Physical health:** AWWs reported sometimes they were unable to perform work tasks effectively because of their ill health. Poor health also hinders field level outreach
- **Climate:** Excessive rains and hot sunny afternoons made it difficult for AWWs to conduct house visits and field level outreach

4.3 Work planning by AWWs

During interviews AWWs shared certain factors which pose a challenge in following the work plan. These were 1) Meetings 2) Records maintenance 3) Community support 4) Infrastructure (Table 53). It emerged through data analysis that meetings have been the biggest challenge in following the work plan. There were instances when AWWs were called for sudden unannounced meetings or at times the meetings stretched for long hours which impacted their day’s function and the plan. Records maintenance (Smith’s S 0.153) is another aspect which impacts their work plan. There is tremendous pressure to maintain a large number of records as most of the AWWs said.

Table 53: Challenges in following the work plan by AWWs

Item	Smith’s S
1. SYSTEM RELATED FACTORS	
Meetings	0.222
Records maintenance	0.153

Infrastructure	0.167
1. a) OTHERS	
Lack of teaching aids and conducting ECCE, Other tasks Multi-tasking	
2. INTER PERSONAL AND COMMUNITY RELATED	
Community support	0.194
3. OTHER FACTORS	
Strikes, Dharnas and Bandhs, Local festivals, Climate, Physical health	

5. RECORDING

About maintaining various kinds of records and registers, AWWs across the three districts said: 1) Service registers related with maternal health for ANC and PNC women 2) Growth records 3) House visit records 4) Vitamin A register 5) Household survey register 6) Immunisation register 7) Stocks supply register 8) Attendance register 9) Pre-primary children record register 10) Birth and death registers 11) Food distribution records 12) Take home ration (THR) register 13) *Indira Amrutha Hastham* (IAH) register (Figure 29).

Figure 29: Registers maintained by AWWs

(Photo location: A project district from Andhra Pradesh)



The AWWs were also asked to share the challenges they face in maintaining the registers. A variety of responses emerged as follows. 1) Extra columns in the registers (like immunisation register) makes recording not only time consuming but also duplicates a lot of information. 2) Difficulty in filling various records and registers like- service registers related with maternal health like ANC, PNC registers because of the customary practice of daughter left for mother's home; growth register of beneficiaries who miss NHD day; and pre-primary records because of the unavailability of children at times. 3) Sudden notice from seniors to submit certain formats, records and registers consume their routine day and, activities at AWCs are impacted. 4) Complexity of filling registers and education status of AWWs. Some of the AWWs mentioned facing difficulties in filling the complex formats partly because their education levels were low as well.

An **AWW from Khammam** articulated *'We do not have enough time to maintain registers as we have to work till 4 pm and we cannot do that work after going home as we have our own personal work. Because of work we are unable to complete the registers in the centre either'*.

Given the complexity and diversity of challenges in recording work, the AWWs were also asked to give suggestions in order to mitigate the same. The AWWs shared a few of the suggestions listed below. 1) Reducing not only the number of columns across registers but also number of registers in total. 2) Minimising data duplication by maintaining a single record. 3) Enhancing cooperation from the community and beneficiaries in order to fill information about ANC, PNC women and households in the registers maintained by AWWs. An **AWW from Srikakulam** gave an example of the IAH register comparing it with immunisation and a few other registers. The IAH is a recently introduced programme in AP with a separate record to be maintained. She shared *'Immunisation register has a couple of columns which are to be again filled in the IAH register. The IAH register is in fact complete in itself and should be considered as the base register and removing all additional records and removing duplications. This will save a lot of my time'*.

6. SUPERVISION

6.1 Support expected from the supervisors

AWWs had expectations from their supervisors in five key domains 1) Accomplishing work tasks. 2) Clear communication. 3) Infrastructure. 4) Motivation 5) Availability of teaching aids (Table 54).

Support expected in the domain of accomplishing work tasks emerged as the most important perceived aspect. An **AWW from Khammam** shared *'There are some less educated AWWs so supervisors must help them in filling up their registers'*. The AWWs also expected their supervisors to provide them with clarity of communication in terms of being given information about various meetings, events and submissions on time and without any delay. With reference to infrastructure, the **AWW from Chittoor** shared *'Supervisor must help in putting in a word advocating for an electricity connection at AWC, providing water and toilet facility, and ensuring availability of gas stove'*. Her narrative in fact encompasses the need for support in terms of infrastructure expected across other AWWs as well. The **AWW from Srikakulam** also expressed the need of a locker or *almirahs* at the AWC in order to keep materials safe. They also demanded that toys and other teaching aids be provided at the AWC in order to ensure the ECCE component for children is conducted properly.

Table 54: Support expected from the supervisors

Item	Smith's S
1. SYSTEM RELATED FACTORS	
Work tasks	0.318
Infrastructure	0.227
Teaching aids	0.129
1. a) OTHERS	
Supportive supervision, Stocks supply, Records maintenance	
2. INTERPERSONAL FACTORS AND COMMUNITY RELATED	
Communication	0.159
Motivation	0.121
REFERENCE TO PHRASES USED	
<ul style="list-style-type: none">Work tasks: AWWs shared that during the times that they were unavailable the supervisor could provide support for the smooth functioning of AWC activities. Moreover, on special days supervisors can play an instrumental role by sharing the work load of the AWWsInfrastructure: Supervisors must help in facilitating the AWWs request for better facilities in the AWC, both in terms of building infrastructure and equipmentTeaching aids: Supervisors must assist in obtaining teaching aids which are necessary for conducting the ECCE and keeping children engagedSupportive supervision: An AWW asked that supervisors must accompany and guide her during field visits including home visits. This was also for security reasonsStock supply: Supervisors must ensure regular and on time supply of stock. The AWWs expected that once the requisition for the stock material is submitted it should be processed in a given span of time and the supervisor can play an important facilitative role in accomplishing the sameRecords maintenance: Supervisors must guide and clear doubts while filling up records and registersCommunication: The AWWs expected clarity of communication from supervisors in terms of giving exact information well on time so that they could plan their day and activities accordinglyMotivation: AWWs said that a word of appreciation acts as a big motivating factor for them. Supervisors must appreciate their work which will in turn impact their daily routine work	

6.2 Support received in actual from the supervisors

AWWs were also asked about actual support received from the supervisors (Table 55). They clearly mentioned four major ways in which support was received 1) Supportive supervision. 2) Records 3) Work tasks like during medical camps, service delivery functions in general on days of heavy load like Immunisation Day. 4) Meetings.

It must be noted that here in terms of support received in actual from the supervisors, supportive supervision (N=08), records maintenance (N=03), work tasks (N=02) emerged as the strongest components in terms of the number of AWWs quoting similar responses. However, in Table above, in terms of support expected from supervisors except for work tasks (N=04), supportive supervision (N=01) and records maintenance (N=01) emerged in the category of 'others' with less significant Smith's S value.

Table 55: Support received in actual from the supervisors

Item	Smith's S
1. SYSTEM RELATED FACTORS	
Supportive supervision	0.583
Records maintenance	0.250
Work tasks	0.125
Meetings	0.042
REFERENCE TO PHRASES USED	
<ul style="list-style-type: none"> Supportive supervision: The AWWs shared that supervisors assist them in imparting ECCE as they do face challenges while conducting the same. Supervisors guide them in problem solving and conflict resolution especially while dealing with the community and management of difficult cases Records maintenance: AWWs across the three districts said that supervisors assist them in filling up records and registers. As observed by the field data collection team, supervisors of AWWs especially from remote tribal cluster AWCs of Srikakulam were instrumental in filling up the AWWs records and registers and guided them as much as possible Work tasks: Two AWWs (one each from Chittoor and Srikakulam) shared that supervisors help them in sharing extra work load, planning and managing tasks Meetings: One AWW shared that her supervisor usually attends routine meetings with her. This helps her in understanding issues better with the supervisor's help and devise solutions for the issues 	

7. MEETINGS

AWWs across all three districts expressed a total of ten kinds of meetings that they had to attend in any given month. Table 56 gives a list of meetings, in descending order of enumerated frequencies, as attended by AWWs in a month. Five kinds of meetings were enumerated by the maximum number of AWWs 1) Project meetings 2) Sector meetings 3) BLO meetings 4) Special meetings like those related with immunisation etc. 5) Village level meetings with gram panchayat and community members.

Table 56: Meetings attended in a month by AWWs

Item	Frequency (N= 12)
Project meetings	12
Sector meetings	12
BLO meetings	03
Special meetings	03
Village meetings	03
Other meetings	Meetings with higher officials from the state/district, Convergence meetings with other departments, Emergency meetings, Department specific meetings, ASHA meetings

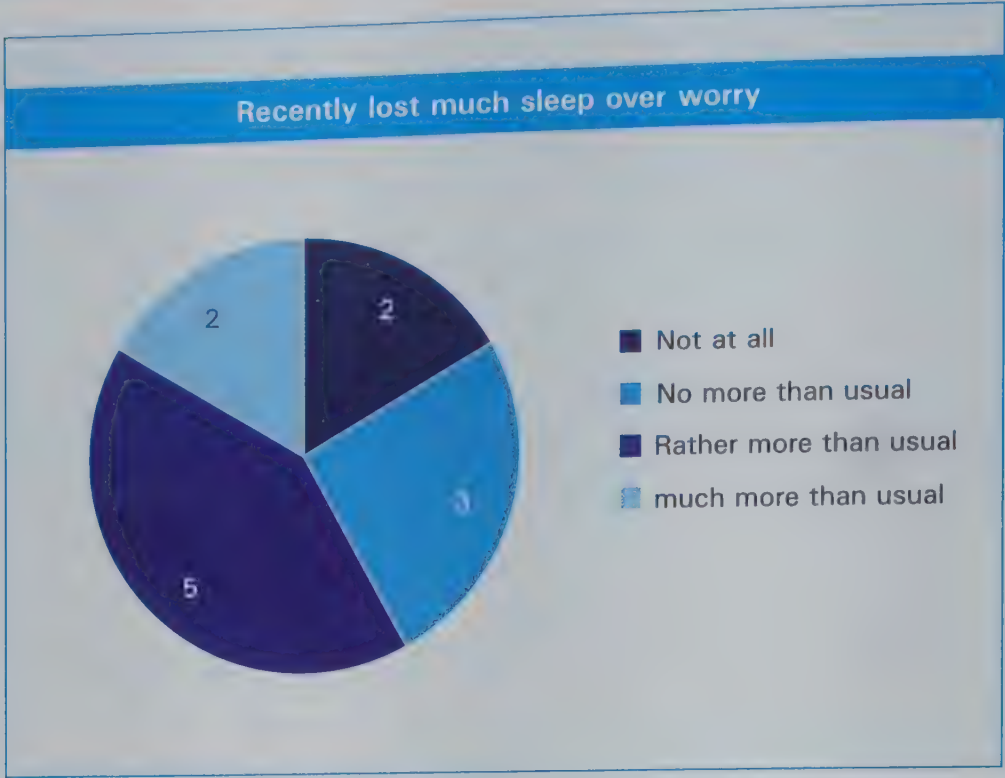
8. PHYSICAL HEALTH OF AWWs AND WORK

The AWWs spoke about suffering from ailments like gastritis, sinusitis, thyroid related disorders, low blood pressure, headaches, kidney stones, back pain, knee pain etc. They did accept that their health condition impacted their functioning when in the AWC and in the field. An **AWW from Chittoor** mentioned '*Because of gastritis and knee pain, conducting pre-school activities slows down*'. However, there was no other substantial sharing. An **AWW from Srikakulam** expressed '*My helper is too old to be able to do field outreach along with me. At times when I've to go for the meetings, the helper has to go to the field to distribute SNP and THR to beneficiaries who had not come to the AWC. Given her age it is very difficult for her to climb up in mountains to reach tribal habitations*'. An **AWW from Khammam** mentioned '*Because of my sickness it becomes difficult for me to go out in the sun to the houses for house visit. However, while being at AWC it is much easier for me.*'

AWWs were also asked about their wellness related aspects through close ended questions with response to be given on a *Likert scale*. Five key aspects were asked through a five item general health questionnaire. The findings are presented below.

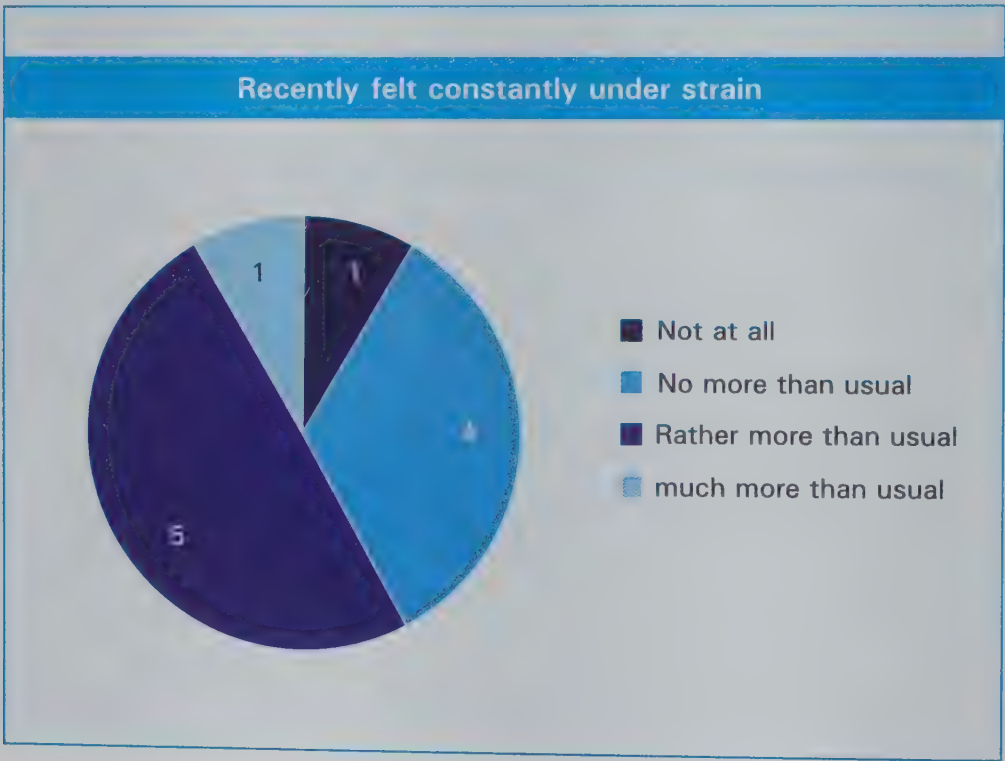
Seven AWWs shared that they suffered loss of sleep over worry which was more than usual. Three AWWs expressed no more than usual loss of sleep while two AWWs did not experience any change in their sleeping patterns (Figure 30).

Figure 30: Recent loss of sleep because of work related worry



The AWWs were asked to share any recent experience of being constantly under strain because this may directly or indirectly impact her work functioning (Figure 31). Out of the total (12), six AWWs reported to have experienced constant strain in recent times while four AWWs experienced the usual level of strain.

Figure 31: Recent experience of being constantly under strain



An individual's ability to enjoy normal day to day activities in turn greatly impacts his/her ability to perform tasks during the day. Thus, as revealed through data, eight AWWs reported to have been able to enjoy normal day to day activities more than normal while four AWWs expressed about the same level of day's experience as before. This finding has been in contrast with AWWs recent experience of being constantly under strain, as presented above.

Since it was observed during pilot field visits that the present status of an AWWs health did impact her functioning at the facility and field level, AWWs were asked to share their opinion

about the same (Figure 32a and 32b). Seven AWWs felt that their health status had no impact on their functioning at the facility level while four AWWs spoke about slight to moderate levels of impact. One AWW clearly expressed that her health status severely impacts her functioning at the facility level (Figure 32a). At the field level, four AWWs shared about slight impact and three AWWs expressed their health status had moderate levels of impact on their functioning. Four AWWs shared about no impact while one reported that her ill health had a severe impact upon her field level functioning (Figure 32b).

Figure 32a: Health status impacting functioning of AWWs at facility level

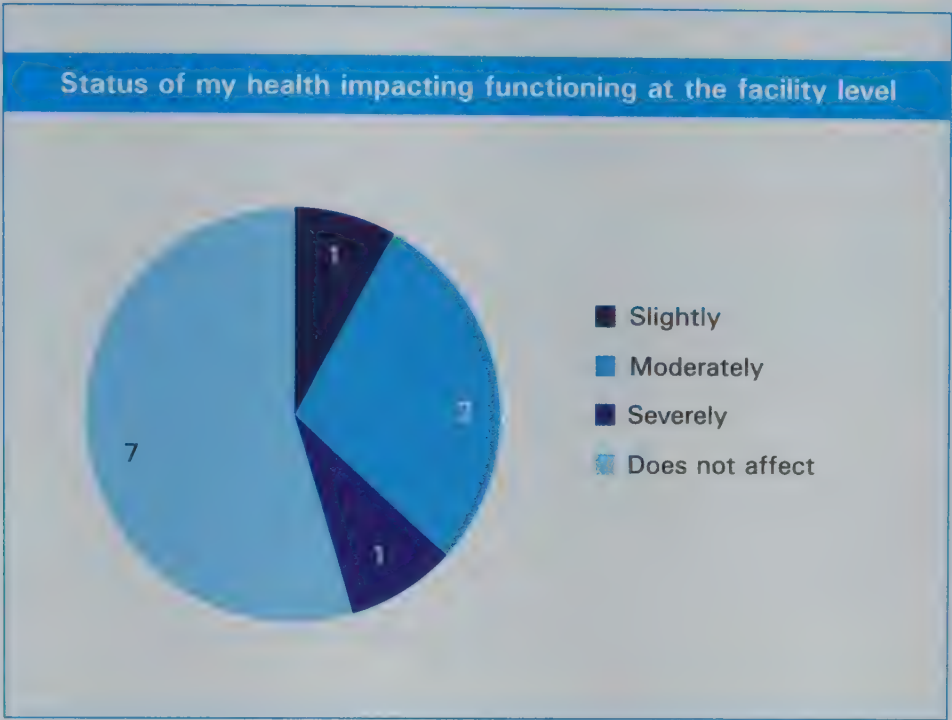
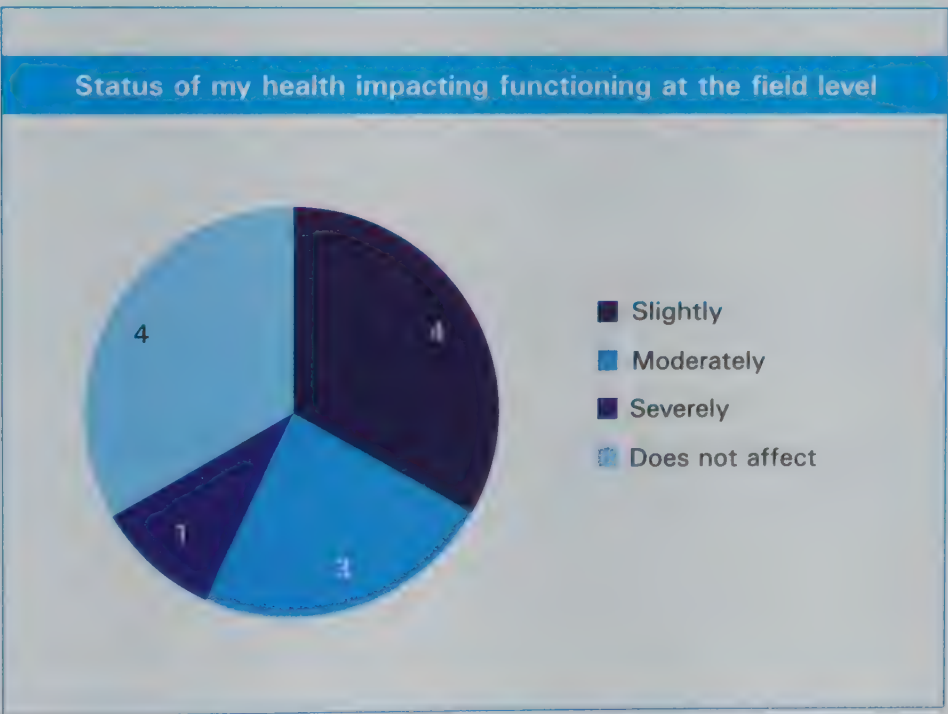


Figure 32b: Health status impacting functioning of AWWs at field level



9. TRAININGS

AWWs expressed a range of training areas like, 1) Conducting ECCE. 2) Maintaining various kinds of records. 3) Computer training. 4) Specific knowledge building sessions on health and hygiene, nutritional services, maternal health. 5) Growth monitoring (Table 56). The maximum need for training was expressed by 11 AWWs in the domain of conducting ECCE. The **AWW from Khammam** specifically asked to be trained in using the curriculum to teach children along with how to use various teaching aids and methods creatively to engage children. Through TAM observations, it is evident that though ECCE/NFE activities consumed the maximum amount of time per AWW in a week, yet the AWWs across the districts expressed difficulties in conducting the same. Moreover, AWWs across the districts emphasised on the need to be oriented about the new registers and records introduced so that they could fill up the same with better understanding. One AWW from Chittoor asked for computer training so that she could update the records online. One AWW from Khammam expressed the need to be technically trained in growth monitoring so that she could do the same effectively in her centre and on NHD days.

Table 56: Training areas expressed by AWWs

Item	Frequency
ECCE	11
Records maintenance	08
Computer training	01
Growth monitoring	01
Other areas	Refresher trainings, Training on aspects of maternal health, Nutritional services

AWWs were also asked about their need to be trained through close ended question with a response on a *Likert scale*. When asked if AWWs were trained for the task they perform, nine of the 12 workers (4 agreed strongly while 5 agreed that they were adequately trained though not so strongly) agreed that they *were* trained; while three AWWs did not say anything. Out of 12, only two AWWs had received computer training while the remaining nine were functioning without the same. Thus, as observed by the field data collection team, though AWWs in general felt that they were trained but upon being asked about specific areas of training, the AWWs did mention a range of training areas.

10. SCHEMES AND POLICIES OF THE GOVERNMENT IMPLEMENTED IN THE DISTRICT

During the interview, AWWs were asked about various schemes and policies as implemented by the respective governments of AP and TS. The AWWs spoke about various schemes and policies being implemented like 1) Bangaru Talli 2) Balika Samruddhi Yojna 3) Anna Amrutha Hastham in AP and Arogya Lakshmi in TS 4) Girl Child Protection Scheme 5) Midday Meal Scheme 6) Janani Suraksha Yojna (JSY) from the Health Department 7) 108 Ambulance Service 8) 104 Service. All of these schemes and policies were related directly or indirectly with the AWWs work for the health and nutritional status of women and children.

11. SUGGESTIONS GIVEN BY AWWs TO IMPROVE WORK PERFORMANCE

AWWs across the districts were asked to share a few suggestions in order to improve their work performance. There were two key suggestions mentioned by a maximum number of AWWs.

- 1) The AWWs demanded proper infrastructure for AWCs in terms of functioning and well maintained buildings, working equipment like growth monitoring scales, operational cooking stoves etc.
- 2) Providing teaching aids.
- 3) Maintaining fixed disciplined timings of AWC functioning.
- 4) Strengthening community support.
- 5) Ensuring on-time regular stocks supply (Table 57).

Table 57: Suggestions to improve work performance as given by AWWs

Item	Frequency N= 12
1. SYSTEM RELATED FACTORS	
Infrastructure	06
Teaching aids	03
Disciplined timings	01
Stocks supply	01
1. a) OTHERS	
Ensuring transfer of direct funds to AWW	
Providing trainings	
Reducing number of registers and records	
Practical orientation about newer programmes	
Strengthening referral systems at village level	
2. INTERPERSONAL FACTORS AND COMMUNITY RELATED	
Community support	01
2. a) OTHERS	
Motivation to AWWs	

5F. PERCEPTIONS AND SUGGESTIONS FROM ICDS SCHEME/WDCW OFFICIALS

A. PROJECT DIRECTOR

1. FUNCTIONING OF AWWs

Project directors (PD), ICDS (Assistant Project Directors; APDs were interviewed in Srikakulam and Chittoor because of the unavailability of the PD) were interviewed from each of the study districts in order to better understand various aspects related to the functioning of AWWs and their significance in catering to the health and nutritional needs of beneficiaries. The PDs said that **AWWs services were utilised at the community level mainly in four significant ways** 1) Registration of beneficiaries. 2) Mobilising the community and generating demand for health and nutrition services. 3) Generating awareness in the community about various government schemes that were available and utilisation of the same (*Midday Meal Scheme, Indira Amruta Hastham/Arogya Lakshmi, Take Home Ration (THR), Supplementary Nutrition Programme (SNP), Sabla programme*). 4) Coordination with health workers especially on special days like NHDs.

In the process of catering to the health and nutritional needs of women and children there are very crucial points of interface between the AWWs from ICDS Scheme and the FLHWs and ASHAs from the health department. The PD/APDs shared significant ways through which this coordination could be better reflected.

- 1) Need for a common platform where AWWs and FLHWs/ASHAs can sit across and discuss gaps in reporting. There are observations of a mismatch between the same records in the ICDS and health department. At times there is either over reporting or under reporting which needs to be identified and corrected.
- 2) Strengthening convergence meetings beginning from the PHC level to the district and to the state level. There is need for the MOs and CDPOs to sit across, at least once in three months, and share best workable field strategies and gap areas. Impetus for the same can come from the higher administration i.e., District Collector.
- 3) There is a strong need to completely involve PRIs for 100 per cent coverage during special days like NHDs, Immunisation Days etc., which can be best achieved through a good rapport shared between the village community and ASHAs, AWWs and ANMs.

However, AWWs face certain key challenges while working in line with their job description, which are presented below.

- 1) *Lack of regular on site supervision* for two reasons: vacant positions of supervisors and inadequate skills in supervisors themselves to deal with the technical and softer aspects of the AWWs field level functioning.
- 2) *Lack of skills* in AWWs for e.g. related with reporting, growth monitoring etc. There have been no refresher trainings for the workers based on the need felt by them. Even if they had it was long back in a curriculum and language (Telugu) that was directed from the state. But in certain areas, dialects are spoken and understood instead of Telugu language. Moreover, trainings are classroom sessions which do not give adequate exposure to hands on skill building.
- 3) *Lack of equipment maintenance* like growth monitoring scales makes it difficult for AWWs to carry out routine functions related with growth monitoring.

- 4) *Age and Qualification:* AWWs are quite aged (50 years plus) who were recruited in the 70s at the time that ICDS was conceptualised. They are either illiterate or minimally educated which is not sufficient keeping in view the work requirements they have (recording, growth monitoring, health education etc). Age has a direct physiological impact on their field level outreach especially when it is in a remote location and her education level impacts her ability to conduct ECCE activities effectively.
- 5) *Difficult to reach geographical field locations,* for example hilly remote scattered tribal habitations in Srikakulam which the AWW from the AWC in the plains found difficult to reach.
- 6) Lack of community support and negligence in spite of awareness building efforts by AWWs. Another challenge is poor attendance of beneficiaries in AWCs. Some of the lactating and pregnant women do not come to AWCs to take the nutritious food being provided instead they send their attendees to get the food from the AWC. Pre-school attendance also needs to be increased as children do not come to the AWC for various reasons like parents go to the fields for work, habitation/home is far from AWC etc.
- 7) Other duties which are not part of her job description but mandatory. For e.g. election duty, surveys etc.

2. SUGGESTIONS TO IMPROVE FUNCTIONING OF AWWs

Across the study districts certain key suggestions emerged from the PD/APDs in order to improve the functioning of AWWs (Table 59).

Table 59: Suggestions by PD/APDs

ADMINISTRATIVE
<ul style="list-style-type: none">• Selection and recruitment criteria of AWWs should be made more stringent and educational criteria should be increased• Filling up vacant positions of supervisors in order to reduce supervisory burden on them• Designing a localised curriculum, which is not only culturally relevant but also understood by the locals (in certain areas instead of Telugu local dialects are spoken and understood)• Regular work planning along with the team keeping in view the ground realities• Promotions should be based on a balanced mix of adequate educational qualifications and skills and not just on experience
SKILLS BUILDING
<ul style="list-style-type: none">• Providing trainings for skill up gradation and supervisory mentorship to provide on-job trainings• Organising exposure visits to better performing AWCs for peer learning
SUPERVISION AND MONITORING
<ul style="list-style-type: none">• Supportive supervision to be provided by supervisors and frequent monitoring visits• Joint monitoring visits should be conducted by the health department and ICDS Scheme officials and supervisors

INFRASTRUCTURE AND LOGISTICS
<ul style="list-style-type: none"> Regular maintenance of equipment
COMMUNITY RELATED ASPECTS
<ul style="list-style-type: none"> Increasing community acceptance by strengthening rapport (supervisors and CDPOs interaction with the community during their monitoring visits)
WORK PLANNING
<ul style="list-style-type: none"> Need to organise convergence meetings at the PHC, district and state level across health department, PRI and ICDS Scheme in order to discuss gaps and strategies to mitigate the same. This will also help in minimising the duplications in records Reducing other work tasks which are not related with job responsibilities Minimising political involvement in AWC activities Daily work planning should be insisted upon and field diaries would assist in the same
SERVICE DELIVERY
<ul style="list-style-type: none"> Organising special days AWC wise (In Khammam, the NHD should be conducted AWC wise which is not being done right now) Conducting intense prioritised house visits with follow ups

B. CHILD DEVELOPMENT AND PROJECT OFFICER (CDPOs)

1. FUNCTIONING OF AWWs

Development of **monthly work schedule plan and its implementation** is one of the key aspects associated with the effective functioning of AWWs and consequential management of time. Six CDPOs across the three districts shared various ways through which the AWWs monthly work plan is developed. 1) Through the platforms provided by sector, project and district level meetings, the CDPOs gain clarity about priorities and agenda which is in turn reflected in the AWWs work schedule. 2) Supervisor feedback and follow up visits enable AWWs in adapting their plan to the field situations and requirements. 3) Days such as NHDs serve as means of convergence between the health department and ICDS. It enables AWWs to better understand field level requirements and incorporate the same as part of their monthly plan. 4) Peer learning also helps some of the AWWs to develop their plan and incorporate best practices as adopted elsewhere.

In the process of work planning and implementation there are certain key challenges faced by the AWWs. The CDPOs listed a few of them.

- 1) Other department's work not related with job description of AWWs like election duties, surveys etc.
- 2) Additional responsibilities because of vacant AWW positions, deputations etc. which in turn adversely impacts key activities like pre-school education.
- 3) Heavily burdened supervisors because of vacant positions in the supervisor's cadre which also restricts their availability.

- 4) The AWWs political involvement and/or affiliation with local parties compromises the functioning of the AWC and service delivery.
- 5) In the AWC, medium of teaching is in Telugu whereas parents from the community demand that the medium of teaching be English like it is in convents. This creates friction between the community and AWWs.
- 6) *Education level of AWW*: Inadequate or no education of AWWs is a big hindrance in the effective delivery of pre-school activities and inactivities like recording, growth monitoring etc. This is more common for AWCs located in remote and tribal locations where the availability of educated AWWs is less common.
- 7) In Srikakulam, the CDPOs spoke about overlapping schemes from ITDA and ICDS which creates confusion among beneficiaries.

2. SUGGESTIONS TO IMPROVE FUNCTIONING OF AWWs

Across the study districts the CDPOs made certain key suggestions to improve the functioning of AWWs (Table 60).

Table 60: Suggestions by CDPOs

ADMINISTRATIVE
<ul style="list-style-type: none">Reducing the work of other departments and allocation of the same after work hours (4:00 PM)Filling up vacant positions of both AWWs and supervisors in order to reduce additional work load and improve planning as wellIn Khammam, a specific recommendation was made for the hiring of an additional data entry operator at the CDPO officeReducing the reporting work load in terms of the number of registers to be filledDesigning culture specific curriculum especially for AWCs located in tribal areasProviding additional workers at mini AWCs so that the AWW can focus upon core service delivery activities and ECCESelection and recruitment of AWWs based on appropriate education qualifications and skillsPromotions should be based on skills and qualification and not just on experience aloneProvision of link worker to the AWW in order to help out in community level activitiesImproving convergence between ICDS and the health department with periodic meetings between the workers and officials
INCENTIVES
Financial
<ul style="list-style-type: none">Payment of regular salaries with increments
Non-financial
<ul style="list-style-type: none">Rewarding and awarding AWWs for the good work they doMorale support and motivation to AWWs through supervisors

SKILLS BUILDING
<ul style="list-style-type: none"> • Providing refresher trainings with hands on exposure in smaller groups and in a language understood by the AWWs (especially where dialects are spoken) • Developing model AWCs to serve as models for peer learning for other AWWs and AWCs • Exposure visits to better performing AWCs in order to learn best practices
SUPERVISION AND MONITORING
<ul style="list-style-type: none"> • Supportive supervision • Periodic meetings (review and sector) of AWWs and supervisors in order to address issues and devise strategies for better service delivery
INFRASTRUCTURE AND LOGISTICS
<ul style="list-style-type: none"> • Improving infrastructure and facilities provided at the AWCs (toilets, functioning equipment, and maintenance of stock rooms)
COMMUNITY RELATED ASPECTS
<ul style="list-style-type: none"> • Enhancing community support by motivating parents and linking them with AWC services • Strengthening involvement of the community in AWC activities especially of PRI members
SERVICE DELIVERY
<ul style="list-style-type: none"> • Enhancing focus on programmatic activities like pre-school education • Adopting creative teaching methods like video classes for children in order to better engage them

C. ICDS SUPERVISORS

1. ROLE OF ICDS SUPERVISORS

Across the study districts at each of the cluster levels, ICDS supervisors were interviewed in order to better understand their role in the functioning of AWWs. Supervisors clearly expressed that they had a large number of AWCs and AWWs to supervise every month which was mainly because of the vacant positions. In the non tribal cluster AWC, Srikakulam an ICDS supervisor was supervising 56 AWCs and 56 AWWs while in Seetampeta cluster of the district, 35 AWCs and 34 AWWs were being supervised. Likewise, in the non tribal cluster AWC (Satyavedu cluster), the Chittoor ICDS supervisor was supervising 55 AWCs and 51 AWWs while in P.Kothakota cluster, 63 AWCs and 55 AWWs were being supervised in a month by a single supervisor. In Khammam, the number of total AWCs and AWWs was comparatively less. In the non tribal cluster, 40 AWCs and 20 AWWs were being supervised while in the tribal cluster 25 AWCs and 20 AWWs were being supervised.

Planning supervisory visits amidst such a large number of AWCs and AWWs was quite a challenging task for the supervisors. They shared the two key ways through which their monthly visits were planned 1) Frequent field visits were undertaken with the prime focus on priority field visits and on special days like Immunisation Day or NHDs 2) A monthly field visit plan was prepared based on field level requirements and shared with the CDPOs for feedbacks.

The supervisors clearly mentioned that they had a significant role to play in the functioning of AWWs and effective service delivery. Roles were identified in the following manner:

- 1) Records verification.
- 2) Quality check by talking directly to beneficiaries (children, women) and community members.
- 3) Supportive supervision of AWWs.

Based on their experience of working with AWWs supervisors identified certain key challenges faced by the AWWs in the planning and implementation of the regular work plan like 1) Unscheduled and long meetings impact the AWWs regular plan. 2) Lack of co-operation from the community. 3) Work for other departments, which are not related to the job description of AWWs. 4) Political involvement in AWC activities and the AWWs affiliations. 5) Vacant positions of AWWs and AWHs in certain places. 6) Low qualification and skill set of AWWs as against the requirement affecting the performance of job tasks. 7) Lack of infrastructure, equipment and maintenance (no toilets, no space for cooking, no store room to store stock).

2. SUGGESTIONS TO IMPROVE FUNCTIONING OF AWWs

Based on their direct experience of supervising AWWs (Table 61) the ICDS supervisors made certain key recommendations across the study districts.

Table 61: Suggestions by ICDS supervisors

ADMINISTRATIVE
<ul style="list-style-type: none">While selecting AWWs a strict age criteria must be followed. In the present scenario where there are over age AWWs also it is very difficult for them to fulfil job duties like recording, ECCE component, growth monitoring etc. because of low levels of educationMinimising other department’s work in order to save the AWWs timeA curriculum based time table should be prepared at the state levelReducing the number of registers will give the AWWs more time for service deliveryReducing the workload on the supervisor cadre by filling up vacant positions and dividing AWCs to be supervised equally among themMeetings should be planned in advance and information about them given in time so that they can adjust the work schedule accordingly
INCENTIVES
Non-financial <ul style="list-style-type: none">Awards and rewards to be given to better performing workers on special occasions like Independence Day or Republic Day
SKILLS BUILDING
<ul style="list-style-type: none">Regular trainings focusing especially on pre-school activities
INFRASTRUCTURE AND LOGISTICS
<ul style="list-style-type: none">Communication facilities with allowances should be provided to AWWs

6. KEY RECOMMENDATIONS

The present Unit presents the key recommendations to be utilised by policymakers/ administrators and other related stakeholders for effective utilisation of time by FLHWs, AWWs and ASHAs. It must be mentioned that the recommendations given here have been suggested by the following sources 1) Participant interviews/FGDs comprising of officials, FLHWs, AWWs and ASHAs. 2) Actual field level observations and interactions made by the data collection team in corroboration with existing secondary literature. 3) Inter-state experience generated through workshop comprising of practitioners/experts associated with the TAM study and practicing across other states like Rajasthan, Maharashtra etc. The recommendations have been presented below under various thematic heads.

POLICY

1. Need to revisit the requirements of various health programmes from FLHWs in line with their job description.
2. For efficient working we may need to redefine feasible job responsibilities and formulate realistic model work plans.
3. Revisit the role of MPHWS-M and potential of some of the sub centre level tasks to be re-distributed among ANMs and MPHWS-M with strong supervisory support and performance monitoring. MPHWS-M can be of help across various service delivery areas (national disease control programmes, NCDs, adolescent health, health education, hygiene and sanitation etc).
4. Promotion avenues based on acquired new skills, higher level training and performance may serve as motivation factor and improve efficiency. It was observed that FLHWs desire such provisions and were in favour of skill based recruitments and performance based promotions which could itself be a motivation factor to increase efficiency in work.

GOVERNANCE

1. Work plans should be periodically reviewed taking into account all new programmes and initiatives introduced and corresponding job duties allocated. A routine follow up of the work plan by supervisors and MOs/CDPOs will better enable its effective implementation.
2. Ensure realistic bottom up work planning at the PHC level with participation of all key stakeholders like FLHWs, ASHAs, supervisors and MO and region specific planning based on nature and epidemiological needs of the population. The tribal cluster plan has to be different from the non-tribal cluster plan. Targets should be set accordingly which can thus be easily met.
3. Reduce burden of other work tasks which impact the work planning and functioning of FLHWs and AWWs. Through the TAM study it emerged that while AWWs were increasingly involved in other tasks not related with their work like election duties, surveys etc, ANMs were often posted in PHCs for outpatient or pharmacy related duties because of vacant positions. This did impact their own work as AWWs or ANMs.

4. Develop supervision and monitoring plan for FLHWs and ensure budget and other resources for the same.

MANAGEMENT

Administration

1. Maintain common and fixed schedule of administrative events like meetings, trainings so that the workers regular work plan is not drastically altered. Work plan of FLHWs should be such it sets out fixed number of days for service delivery functions with scope for certain number of days in order to incorporate any ad-hoc activities.
2. Better administration at the SCs, PHCs and AWCs may facilitate and make it conducive for FLHWs to work, as mentioned by some. This may require some supportive guidance, periodic audits and monitoring from within the system as well as committed involvement of PRIs.
3. Consider provision of better transportation facilities and/or allowances to ANMs and MPHWS-M so that they can easily hire a vehicle, without out of pocket expenditures, to travel within the field.
4. Consider provision of travel and daily allowance/accommodation facilities to ASHAs and/or ANMs while accompanying patients to distant health facilities.

Human resource

5. FLHW felt under confident about some clinical aspects of service delivery and expressed need for training and support. Thus explore provision of cyclical postings of ANMs at first referral units (FRUs) or district hospitals for three months once in three years for upgrading clinical skills under the guidance of nurses and medical doctors. This will motivate them and have added advantage to build networks with the referral centres.
6. Invest in strengthening mid-level supervision in order to enhance soft skills like leadership, problem solving, supervision, community interaction etc.
7. Direct and focused supervision of ASHAs is crucial. The TAM study has demonstrated the significance of ASHAs especially when one ANM position is vacant. Devising a link worker/ *ASHA Sahyogini* (as in the State of Madhya Pradesh) can be of great support in concerted supervision and community level activities.
8. Training of FLHW on soft skills in order to be able to better engage with the community. Refresher trainings on a regular basis with hands on exposure to new programmes, in smaller batches.
9. Special support or trainings for older ANMs and AWWs to catch up with modern technology and data needs. Routine trainings for ASHAs with skill base building through practical exposure.
10. Fill up vacant positions across grassroots cadres and of supervisors. Recruitment of ANMs and MPHWS-M which has almost stopped after 2005. Positioning of MPHWS-M will also help in clearly demarcating the job descriptions of ANMs and MPHWS-M with the consequent reduction in overall work load and multi-tasking.
11. Take corrective actions for phenomenon like routine absenteeism.

Incentives

12. Ensure on time payment of salaries and incentives for better performing FLHWs, ASHAs and AWWs.
13. Non-financial incentives like awards to better performing workers and giving them recognition, motivational support from supervisors and higher authorities was a need expressed by the FLHW themselves. This will certainly bring in better employee satisfaction and inspiration.

Convergence

14. Constitute/innovate a prototype of *Gram Aarogya Kendra* at the village level in AWCs where an ASHA comes on a daily basis for 1-2 hours in order to discuss village level health and nutrition issues in coordination with AWWs. Similar co-ordination was observed at a few places however, a standard mandate will ensure this at other places too.
15. Strengthen Village Health, Sanitation and Nutrition Committee activities by ensuring the involvement of ASHAs, ANMs and local *panchayat* members.
16. Enhance inter-department convergence by introducing common platforms like meetings between MOs and CDPOs, better planning and execution of NHDs etc. Common meetings will also minimise the mismatch in data maintained by AWWs and ASHAs.

Infrastructure

17. Providing proper infrastructure is vital for the functioning of ANMs such as government owned SCs or suitable rented spaces to be taken on lease in advance and timely payments. Routine maintenance of buildings, equipment, furniture etc., and logistics management shall be done. AWCs too require storage space for ration. Teaching aids and locally adapted ECCE curriculum should be routinely provided to AWWs.

Service delivery

18. Support in developing holistic and realistic work plans. FLHWs need to have a better understanding of work plans and how these can help them achieve their targets better.
19. Emphasise on the significance of health education and the use of IEC in order to build awareness in the community and enhance service utilisation. Awareness generated in the community will further enable in community driven demand for health service delivery. ASHAs, ANMs, AWWs, MPHWS-M need to be better trained for counselling at the individual level.
20. Emphasise on field level outreach strategies like home visits, health camps, especially in tribal cluster PHCs and difficult to reach terrains.
21. Strengthen the role of FLHWs for health programmes other than maternal and child health and incorporate them in work plans.
22. Provision at the PHC level or a mechanism through which there is a direct delivery of vaccines on UID day (like Rajasthan). This will reduce time wasted in getting vaccines from headquarter PHCs.

23. Provision of mobile based follow up of beneficiaries through periodic reminder of special days, vaccine doses, ANC check-ups etc. to facilitate work plans and improve coverage. House listing with mobile numbers can be done by ANMs with the help of ASHAs and AWWs.
24. Reduce the number of records (and reports) as maintained by ANMs and AWWs and ensure a dynamic HMIS with improvement in tracking, routine records uploading etc. Although the system is being devised and would require tablet based data maintenance, the ability to use tablets needs to be strengthened.
25. Need for data entry operator at the PHC level in order to be able to consolidate data better and help generate reports. Although ANMs or MPHWS-M or pharmacists are doing it at PHCs this multi-tasking takes the person away from their designated work.
26. Identify performance indicators for monitoring service delivery by FLHWs.
27. ANMs and MPHWS-M shall be on the job for eight hours. The system shall monitor that in some way to ensure they spend the required time on the job particularly if not staying at SCs.
28. ASHAs to be treated as volunteers not as health system employees who shall be supportively mentored by ANMs.

OTHER CADRE SPECIFIC RECOMMENDATIONS

ANMs

1. Periodic refresher trainings of ANMs in smaller groups and on-job trainings with support received from supervisors. Hands on exposure will enable better skill enhancement. Suggested training areas by ANMs were a mix of technical areas related with knowledge and skills base building and management related. Training areas as expressed by ANMs were communicable diseases, maternal and child health, adolescent health, immunisation, EmOC, new health programmes, online MCTS tracking, maintaining records especially newer formats which are introduced, work planning, dealing with public health emergencies like outbreaks, soft skills building to better deal with various stakeholders.
2. Mandatory preparation of Advanced Tour Plans as per uniform format and stringent follow up of the same by supervisors and seniors. They shall also need support for the same in terms for information about coming events like surveys etc.
3. In AP where an online reporting system is being implemented, ANMs expressed the need for better training especially for online MCTS tracking.

MPHW-M

4. Clearly define the job description of MPHWS-M and better monitoring by MOs and supervisors.
5. MPHWS-M shall spend longer on the job and shall acquire more important and active roles in communicable and non-communicable diseases, community mobilisation and other support work at the centres and for ANMs.
6. Mandatory preparation of work plans and linking these with targets and outcomes.

ASHAs

7. A mobile app can be devised with direct online consolidation of records and further up on timely release of performance based incentives (e.g. ASHA SOFT app as devised in Rajasthan which is for online payment and a monitoring system). This will also help in curbing ASHA drop outs.
8. For ASHAs a certain minimum fixed salary in the tribal regions of TS and AP where they do more than the designated ASHA work and are involved in the distribution of drugs and delivery support. As in states like Rajasthan and Madhya Pradesh, this can serve as a strong financial incentive for ASHAs.
9. Provide allowances to ASHAs to curtail out of pocket expenditure incurred in buying stationery items, communication (mobile recharges), travel while accompanying patients etc.

AWWs

10. Fill up vacant positions of supervisors. The sanctioned posts shall be increased to reduce the supervisor AWW ratio to ensure more direct supervision of all AWWs.
11. Training for AWWs in a comprehensive and creative manner so that they can impart ECCE in a better manner, do accurate growth monitoring etc. AWWs identified the following areas for trainings. : ECCE, records maintenance, computer training, growth monitoring, refresher training on aspects related with maternal health, nutrition etc.
12. Design the teaching curriculum in local dialects which can enable better comprehension by AWWs serving in tribal areas.
13. Develop model AWCs to serve as examples for peer learning for other AWWs and AWCs. Exposure visits to better performing AWCs in order to learn best practices.
14. Provide support to aged AWWs who find it difficult to meet job duties like recording, ECCE component, growth monitoring etc.

7. VOICE OF EXPERTS

In an effort to better understand crucial aspects related with functioning of grassroots service providers with a cross-state experience and disseminate key findings from 'Time and Motion Study (2014-16)', Centre for Economic and Social Sciences - UNICEF Hyderabad Field Office, organized a two day consultation on 29-30 June 2016. Consultation was about 'Functioning of Frontline Service providers for improved health and nutrition outcomes and witnessed presence of people from academia, civil society organizations, government (central and state), and health policy think tanks (National Health Systems Resource Centre; NHSRC). Participants richly contributed to the event bringing to fore experiences from the field with real time data. The two day of the event looked into the presentation of key findings from Time and Motion study, discussion around improvements in functioning of frontline service providers, different scenarios and ongoing initiatives taken across different states for the same, possible solutions and devising a way forward.

1. SESSIONS DURING THE CONSULTATION

During two days of events findings from the study were presented through seven key sessions followed by detailed discussion after each of the sessions. Initial four sessions covered methodology used in the study, key findings across ANM, MPHW-M, ASHA and AWW cadres. A panel discussion was also held on day one titled 'Way to healthier India- Role of frontline health workers' which deliberated upon key themes related with FLHWs.

On the 2nd day, selected stories from the field were presented related with functioning of FLHWs, ASHAs and AWWs followed by presentation of insights gained through interviews with officials. Consultation concluded with an open discussion around key emerging domain areas of FLHWs job descriptions, work planning, monitoring and supervision in the backdrop of the study findings. Each of the available participants were also asked to give three important suggestions for policy makes based on the study findings and discussions.

A detailed account of the panel discussion and open discussion is given in the following sections which yielded significant policy level messages.

Key people present: Consultation witnessed the presence of some key people, of national repute, from the field of Public Health practice, research and policy making. There were government representatives from the health department like Dr. Ajay Khera (Deputy Commissioner-MCH, MoHFW, GoI, New Delhi), Dr. Buddhaprakash Jyoti (Commissioner, Health and Family welfare Department, Government of Telangana), Dr. K. Swamy (Directorate of Public Health, Government of Tamil Nadu, Chennai), Dr. Somaraju (Andhra Pradesh Vaidya Vidhan Parishad). Academicians teaching in various medical colleges and grounded in community medicine along with Public Health research like Dr. Rajesh Kumar (PGI Chandigarh), Dr. Prashanth NS (IPH Bangalore), Dr. Pradeep Deshmukh (MGIMS, Sevagram), Dr. Puneet Mishra (AIIMS, New Delhi), Dr. Dileep Mavalankar (IIPH-Gandhinagar), Dr. G.V.S Murthy (IIPH-Hyderabad), Dr. R.M Pandey (AIIMS, New Delhi), Dr. Sanjay Chaturvedi (UCMS, New Delhi), Dr. Samiksha Singh (IIPH-Hyderabad). There were representatives from UNICEF lead by Health chief Dr. Yaron Wolman (UNICEF, New Delhi) and Chief of Hyderabad Field Office Ms. Ruth Leño and CESS Hyderabad lead by Prof. S.

Galab. Renowned NGO/INGO practitioners in the field of Public Health were also part of the consultation like Dr. Sharad Iyenger (ART, Udaipur), Dr. Pavitra Mohan (BHS, Aajevika Bureau, Udaipur), Ms. Chhaya Pachouli (PRAYAS, Chittorgarh), Dr. Dinesh Agarwal (IPE Global), Dr. Sunitha Upadhyaya and Ms. Srilata and (CDC, Hyderabad), Dr. Dinesh Paul (NICCD, New Delhi), Ms. Viashali Deshmukh (INCLEN Trust, New Delhi), Mr. K.P Rajendran. Eminent people from NHSRC, New Delhi were also present like Dr. Sanjeev Kumar, Dr. Dileep Singh, Dr. Arun Singh. Thus, a great diversity of renowned people present during the consultation gave a good mix of academics and policy to a rich empirical work with policy level implications.

2. PANEL DISCUSSION ON WAY TO HEALTHIER INDIA- ROLE OF FRONTLINE HEALTH WORKERS

Key objective of the panel discussion was to invite eminent practitioners from the field of Public Health to deliberate upon following key three aspects related with the larger issue of FLHWs functioning and performance:

- Universal Health Coverage and Sustainable Development Goals: Need to gear up frontline health workers by Dr. Sanjeev Kumar, Executive Director, NHSRC, New Delhi
- Need to revisit the expectations from, and job responsibilities of Grassroots service providers: Dr. Dinesh Agarwal, Director-Health, Nutrition and WASH, IPE Global, New Delhi
- Supervision and monitoring of frontline health workers: Dr. Rajesh Kumar, Professor of Community Medicine, PGIMER, Chandigarh

Session was moderated by Dr. Ajay Khera who is Deputy Commissioner, MCH with Ministry of Health and Family Welfare with Government of India, New Delhi. Undoubtedly panelists presented some thought provoking aspects related with the functioning of FLHWs which led to brain storming among the participants present. Key aspects with policy implications which emerged as a result of the discussion are as follows (for a detailed note on the panel discussion see annexures).

Universal Health Coverage and Sustainable Development Goals: Need to gear up frontline health workers

- NCDs are an emerging major killer in India with smaller numbers squeezed for diseases due to communicable infections, maternal, perinatal and nutrition related conditions.
- In current primary health care service delivery preventive and promotive care remain under addressed. Preventing diseases in the beginning will automatically reduce the workload of FLHWs. There is a need for 'whole population approach' for health of the people.
- Sustainable Development Goals offer a good opportunity to address factors which lead to diseases. Four of the goals are related with determinants of diseases.
- Promoting mid-level health care providers: under comprehensive primary health care, approved by GoI, all SCs will become health and wellness centre with a practitioner like Nurse practitioner approved by Nursing Council of India with a six months of training program by the government. Bridge training can also be given to AYUSH doctors to be practitioners.
- Need to mobilize families because frontiers of dealing with disease and well-being in actual are families. Primary level work by FLHWs is preceded by what families and individuals can do at home and what social support provides.
- There is a need for national commission on human resource for health which will look into human resource component in a comprehensive manner.

- Creation of new cadres like Public Health cadres. Need to impart skills of management to clinicians turned program managers and district administrators.
- Augmenting skills through accreditation, reaccreditation etc.
- Problem solving supervision to be built in
- Team building with bottoms up planning and a team work plan shall be devised together.
- Decentralized participatory planning to be practised
- Addressing shortage and skill gap in existing cadres using innovative technological solutions.

Need to revisit the expectations from, and job responsibilities of Grassroots service providers

- Important to invest in FLHWs, ASHAs and AWWs to achieve equity and larger goals of sustainable development.
- Taking into account fast changing disease spectrum which gives rise to need for new roles of health workers. Redefine the package of burden of disease to be addressed comprehensively in future. State level planning is crucial here depending upon state specific burden of disease.
- Ecosystem related with health workers like their motivation, attitudes and working structure impact functioning and performance greatly.
- Integration with the community through mechanisms like decentralized planning is very much required to strengthen support from the communities. At the level of health system, mentoring and augmenting skills of the workers is a must.
- Need to expand their roles to primary health care related clinical skills which can also help in dealing with scarcity of the doctors. This will also establish the FLHWs significance and respect among the community.
- Flexibility in working is very much crucial in terms of work hours, visit schedules, activity plans. Work plan should be flexible enough for them to be able to add additional needs of the community in an organised manner.
- Health workers are a subsystem in itself which needs to be adequately funded in terms of recruitment, capacity building, and supervision. In health budgeting, there is no specific funding structure for primary health care and number of community level health workers is huge. There is need to have a complete system. State level investment in health will be highly significant.

Supervision and monitoring of frontline health workers

- Important to support FLHWs from the health system in the times of rapidly changing disease spectrum and importance of primary health care delivered by them in overall decline of mortality. Continuity of care can only be provided by FLHWs and they are the ones who are connected with everybody in the community. FLHWs are also instrumental in ensuring adherence to treatment with a family approach to care.
- Supervision should be by supervisor of the same gender who is well-qualified and separately trained. It is better to promote someone who is already one amongst them with experience. Need to give ANMs promoted to LHVs not only more salary but also distinct designation.
- Supervision should be on weekly or monthly or quarterly basis with a balance of meetings.
- Depending upon number of supervisors, supervision should be individually and/or in group. Onsite supervision while in the field or in the clinic and sharing of best practices in a group meeting can be very effective.

- Supervision should rationally combine clinical care, technical and managerial aspects, problem-solving with capacity building.
- Planned supervision with prior information is advisable. Supervisor should have his/her own plan and there is a need to monitor FLHWs plan as well. Use of checklist is beneficial in order to determine 'what to supervise'.
- Use of electronic system for monitoring and face to face qualitative component by the supervisors should be done.
- Supervisors themselves need to be working in the field and facility and not merely supervising.
- A plan shall be devised for supervision and monitoring which obviously would incur resources. Thus the plan and activity for supervision and monitoring shall be separately budgeted.

3. OPEN DISCUSSION ON KEY EMERGING THEMES

This session, chaired by Prof. G.V.S Murthy; Director IIPH-Hyderabad and Prof. Mavalankar; Director IIPH-Gandhinagar, invited an open discussion with the participants based on first day's deliberations and to take forward study findings towards policy implications. There were three key topics for discussion: job description of FLHWs, work planning, monitoring and supervision of FLHWs.

Present section presents an amalgam of key discussion points with a policy message along with suggestions given by each of the participants.

FLHWs job description: How realistic are the job responsibilities of ANMs?, Do we need to re-visit the roles and responsibilities of MPHWS-M?

- Viewing current job descriptions of FLHWs in the backdrop of current health needs of the population. A thorough revision of job description with removal of redundant functions will help in distributing the work load and functions better. Job description of FLHWs have to be designed to meet those emerging and existing needs. It is also essential to look into the support available to the workers for being empowered to manage those functions.
- Task sharing and task shifting between cadres with due training. Need to re-think on the lines that can some of ANM functions be really shifted to MPHWS-M. Clear demarcation required between demand and supply of services. In the process MPHWS-M or ANM cannot be looked as individual entities but as part of one system.
- MPHWS-M have a clear role in Public Health. Their role needs to be well-defined and their contribution must be well utilised. States like Tamil Nadu and Orissa have well utilized this cadre which should be looked into.
- The pattern of engagement of/tasks required from ANMs needs a serious shift. Time should be liberated to engage ANMs more for tasks that involve primary clinical skills (Paramedic skills as identified by Indian Nursing Council). There has to be clear demarcation in her roles from that of ASHAs and staff nurses.
- Looking at what is practical and feasible while drafting JDs of ANMs is essential. Clear articulation of list of activities to be done at the centre, on special days and during outreach will help. There is a need to recover basic primary health care related clinical functions of ANMs with liberation of time for adequate utilisation of her paramedic skills.

- Job descriptions of FLHWs and National Health Mission (NHM) statements have to be set in a context and state specific manner. One set of JD cannot fit in all contexts and settings with different priorities. Looking at envisaged larger health outcomes will help in realistic articulation of the same.

Work planning: Can we standardize work planning of FLHWs?, How can government ensure implementation and adherence to the same (avoiding systemic disturbances)?

- Work planning shall initiate with decentralized participatory planning by FLHWs with the community at grassroots. Looking at NGO experience is vital here. Building upon past examples like micro planning used in late 1980's and 90's for immunisation. List of villages and days of immunization listing is available at SCs. However, monitoring of what sessions were planned and what were held in actual can enable in a realistic assessment of tasks.
- Work plan has to be at the facility for the whole team. There is a strong need to have a clear distinction between work plan, micro plan and trip report at FLHWs level. Team building should be facilitated with softer skills and supportive work culture.
- Work plan should have definitive activities on fixed days and other activities to be imparted more flexibly on out-reach days. Work plan should be devised in manner that clinical care at SC facility on all week days is catered by one ANM or MPHW-M while others provide field out-reach services. The facility and outreach days shall be rotated alternatively between the FLHWs.
- Work plan should be structured for special days too like NHDs (or Village Health and Nutrition days; VHNDs) with a clearly defined mechanism for how rotation will happen. About this 'definite part community too will be aware which will improve coverage. Village level announcements through participatory communication techniques can be used. This in turn will involve community for monitoring work plan at least for the definitive bit.
- Once the job description is decided a generic template need to be designed, with 50-70% time being consumed in core functions for fixed number of days and flexibility to accommodate any ad-hoc functions. Along with it a strong plan for logistics e.g. supplies also needs to be there. With all this in place, monitoring is much feasible in order to see work planned vs work done.
- Specific action is needed on ad-hoc directives from the state and the district. Disruptions in work plan like sudden meetings, long duration training etc. need to be fixed from the health system above with five core days of functions in FLHWs work plan. This gives sufficient scope of four -five buffer days in a month for any additional or unplanned tasks.
- Work plan should be structured for special days too like NHDs (or Village Health and Nutrition days; VHNDs) with a clearly defined mechanism for how rotation will happen. One needs to ascertain definite periodicity of certain programs in FLHWs workplace and about this 'definite' part community too will be aware. Village level announcements through participatory communication techniques can be used.
- Standard time measurements as done in other sectors will enable in getting real-time estimates of time required. And if time is known then accordingly a change can be proposed. This will lead to defining of standard operating procedures and planning oriented work.
- Technology that can reduce the time in service delivery shall be explored and invested into. For eg. replacing Sahlis method of Haemoglobin estimation with easier and quicker methods.

- There is a wide diversity in contexts and settings in India in terms of nature and size of the population. Planning and strategies have to be context and state specific. Some states are moving towards RCH while some are moving away. Tackling NCDs is an emerging issue in states like Kerala while in state like Assam priorities are different. Work plans have to consider all of it. Work planning also needs to look into pockets where there are workers and where there are no/inadequate number of workers and also looking at density of the population with type of terrain. Generic guidelines need to be adapted.
- Correct and timely management of data can serve as an evidence base in generation of standardized monthly work plans which can also serve as simple MIS tool for supervisors to monitor. Judicious use of IT can be very much helpful.
- It is important to address underlying issue of resources in order to yield best outcomes out of a work plan. If retrenching of workers like MPHW-M, 2nd ANMs is continued then no amount of work planning will actually help.
- Transport or mobility support to FLWHs will minimize their travel time and enhance time for outreach as per the work plan.

Monitoring and supervision of FLHWs: Plan for supervision and monitoring of FLHW- How shall we devise it and resources required for implementation? What indicators shall be included to monitor the functioning of FLHWs?

- Supervision has to be problem-solving rather than fault finding with a strengthened mid-level supervision. Aspects such as what supervisors are supposed to do, who should supervise should be very clear. Supervision should be preferably by same gender and by an appropriately trained person who is qualified to be promoted as supervisor. Promotion should also take into account performance of the worker. They should have a formal course in Public Health leading a graduate degree to be eligible as supervisors. He/she should be the practicing person in the field. Supervision should be on weekly or monthly basis as required with minimal time spent in meetings. It should be done as a mix of individual supervision and in group. Supervisors should supervise both at the facility and in the field. Supervisors should supervise clinical care delivered by the FLHWs, technical and managerial aspects, aspects in problem solving and building capacities of cadres. Quality assessment of services by the supervisors is very much crucial. Planned supervision with a structured checklist will be very much beneficial to the FLHWs in optimum functioning. Good supervision essentially depends upon the quality of interaction between the supervisors and FLHW. Softer aspects of approachability, self-esteem, work culture becomes very crucial in this. Essential crux of the supervision will lie in how well FLHWs remain connected-motivated and supported.
- Community based bottoms-up monitoring (by community representatives like VHSNC, PRIs and general community) which will also facilitate a rights-based discourse. Citizen mandate has to be a part of the supervision system. Performance based monitoring report of FLHWs should be prepared by the Gram Panchayat with a say in deciding workload management and compensations to FLHWs.
- Supervision shall be of a whole team rather than an individual. A designated block level monitor should very well be able to do this. Supervision and monitoring should comprise of inputs-processes-outputs oriented approach with team accountability that also includes seniors.
- Defining clear job description and work plan of FLHWs is very much crucial for effective monitoring and supervision.

- Monitoring with innovative use of technology based on certain indicators, planned vs accomplished outcomes and face to face meetings is very much crucial. However, technology is only a modality it shouldn't become objective of health system in itself.
- Reporting should be incorporated as part of the service delivery itself rather than as a separate task. This will in turn facilitate in maintaining basic MIS for supervisors to monitor. This in itself will provide tangible benchmarks to 'what to supervise'. Primary purpose of records should be for service delivery and follows up for continuity of care. It should be inputs-processes-outputs oriented with team accountability which also involves seniors.
- Augmenting skills of supervisors with identified core competencies and clarity on operationalization of guidelines available.
- There is a need to increase number of supervisors. LHVs need to be duly promoted with increase in salary and a designation. Use of technology will be beneficial in supervising larger numbers by smaller numbers. Communication using phone etc. should be often.
- Overall travel mobility of supervisors to the field needs to be improved either with TA/DA or mobility allowance.
- Team awards rather than individual awards shall be considered for better team bonding and accountability.
- Monitoring and supervision has to be also at the level of senior officials at the district, sub-district and block level rather than at the level of FLHWs only.
- Burden of monitoring and supervision can be greatly reduced by professionalising the workforce where self-monitoring becomes very significant and motivation of workers in order to be able to see value in their service.

Other key domains

- **Administrative reforms:** In view of 7th pay commission salaries/honorariums of FLHWs and ASHAs should be revised. For contractual ANMs, salaries shall be similar to regular staff.
- Creation of new cadres with public health management orientation is needed in order to manage community based health and nutrition services. This management structure should take charge of FLHWs, AWWs, ASHAs and guide them. Imparting skills of management and supervision to middle and higher level officials who are often clinical turned health managers.
- **Systems improvement:** Ensuring adequate supplies and regular replenishment of stocks. A robust supply chain management system with proactive senior health system officials will play an instrumental role in achieving the same. Supervisors shall take a role in ensuring supplies and stocks.
- **Rethinking around role of ASHA as salaried worker or incentive based volunteer:** It is to be clearly defined whether one expects ASHA to be a community based activist volunteering for positive health outcomes with incentives or a worker with a fixed salary and set roles. There is diversity across states with ASHAs being paid as only honorariums or salaries. If ASHA is to work as a worker there is a much greater need to systematically invest in her training, supervision and monitoring. Ensure Implementation of set roles of ASHAs in service delivery which is beyond ensure immunization support and mobilisation. Training needs to be implemented state specific in accordance with ASHA modules. Efforts should be towards her better integration in health system.
- **Task shifting:** ASHAs should be facilitated substantively to perform some of the ANMs tasks that do not require paramedic skills.

- **Convergence:** Integrating ICDS and health department with better coordination at all levels. District level official may be made responsible for achieving desired results with an empowered decision making.
- Need to increase financial investment into health especially at state level. Financial audits can help.
- **Evidence based data gathering and practice:** Many more empirical studies like present Time and Motion study are needed in pan-Indian context. State-level policy makers should commission such studies routinely. More data or evidence base is required for electronic v conventional register/paper based record keeping and transmission.
- **Records maintenance:** Electronic health record maintenance but with context specific validation studies. Redesigning of field level data collection process in a way that it happens during service delivery with innovative use of IT in it.
- **Augmenting skills:** Induction and periodic refresher training for FLHWs and AWWs. Training also need to factor in changing roles and responsibilities of the workers. These should be able to give practical exposure.

4. CONCLUDING REMARKS

Through the consultation and brain storming discussions around Time and Motion study findings, certain key domains for policy level formulations emerged very clearly.

Job descriptions need to be re-defined with context and setting specifications and responding to emerging needs of the community. Task shifting can be tried out with assigning of primary care related clinical functions to ANMs and other non-clinical functions to ASHAs. Role of MPHW-M needs to be clearly defined in health service delivery. A bottoms up team work planning with monthly revisions and scope for ad-hoc additions with minimal state and district level disruptions will yield optimal service delivery outcomes. Decentralized participatory planning and community based monitoring will ensure adequate community involvement and impetus to discourse of rights based approach. Periodic augmentation of skills of the workers and supervisors is a must with increased state level investment in health. It was realized that a problem solving approach to supervision with training of supervisors is a must. Mix of innovative use of technology along with face to face supervisions can play a vital role. There is a need to build management skills in cadres across and especially those of clinicians turned health managers in the health service system. Nurturance of softer skills with a component of support, motivation and connection is key to adequate performance of FLHWs. It is a high time now when governments need to look into key aspects related with human resources for health like supervision and monitoring, work planning, defined job descriptions, training, recruitment and selection, governance.

ANNEXURE

INTERVIEW SCHEDULES: FLHWs and AWWs

ANMs					
ANM Code No		Age (Years)			
PHC Name		SC Name			
Contact number		Date of joining present Sub-center			
Location of SC (District/Mandal/Village)		Starting time		Ending Time	
Interview Date		Cadre of Worker interviewed (tick appropriate one)		ANM 1 or ANM 2	
Interviewed by		Verified by			
Interviewer Signature					

Instructions

- Take time to fill in the interview sheet carefully and thoroughly
- Use a blue/black color pen to fill your responses in the space provided
- Do not overwrite Ask every item mentioned in the sheet
- Write additional remarks in column provided in the end and if need be write clearly on additional blank sheet with clear reference to question number
- Fill the sheet in clear and neat handwriting
- Do not tamper the sheet and submit it in a proper condition with signature

SECTION 1 SOCIO-DEMOGRAPHIC INFORMATION

S. No	Question	Response	
1.	Education level	10 th standard	
		Intermediate or + 2	
		Graduation	
		Post-graduation	
		ANM Diploma course	
		Any other	
2.	What course have you done for ANM position?		
2 a.	Duration of the course		
2 b.	Have you done any additional course(s)?	Yes.....	No.....
3.	Year of completion of ANM/ FHW course		
4.	Family type	Nuclear.....	Joint...
5.	Marital status	Married	
		Unmarried	
		Divorced/Separated/Widowed	
5a.	If married/divorced/separated, then ask: Total Number of children	One	
		Two	
		More than two	
6.	Monthly family income	Self	
		Husband	
		Others	
6a.	Where do you stay? (Mention village and mandal name)		
7a.	Place of residence: If ANM not staying in SC, ask for reasons		
8.	Mode of transportation *Tick mark against appropriate mode(s) of transportation	<input type="radio"/> Walking	
		<input type="radio"/> Two-Wheeler (Self driven)	
		<input type="radio"/> Two-Wheeler (Pillion)	
		<input type="radio"/> Bicycle	
		<input type="radio"/> Auto rickshaw	
		<input type="radio"/> Bus	
		<input type="radio"/> Others (Specify)	

SECTION 2

9.	Enlist five factors which facilitate you in smoothly carrying out your daily tasks at work (internal and external both) <i>(Instruction: Probe for minimum of one and maximum of five factors)</i>	
10.	Enlist five factors which pose as barrier/challenges in smoothly carrying out your daily tasks at work. <i>(Instruction: Probe for minimum of one and maximum of five factors)</i>	
11.	Can you mention the schedule wise list of tasks that you would have carried out yesterday? <i>*Probe to understand her definition of time management</i>	
12.	Enlist five factors which promote/facilitate effective management of your time <i>(Instruction: Probe for minimum of one and maximum of five factors)</i>	
13.	Enlist five factors which hinder/pose as barrier in effective management of your time <i>(Instruction: Probe for minimum of one and maximum of five factors)</i>	
13a.	Enlist some of the challenges in following up of your work plan.	
14.	Work profile and functioning: Enlist some of your primary roles and responsibilities as ANM As per actual	
	As per job duty chart	
15.	Work planning and super visioning How does a village health plan or sub center plan or micro-plan help in accomplishing tasks? <i>* Ask if plan is available with the worker</i>	
16.	Records and records keeping	
16.a	Report / Record maintained	
16.b	Challenges faced	

16.c	Suggestions on addressing the current issues / challenges	
17.	What kind of support do you expect from your supervisors?	
17 a.	What kind of support do you receive in actual from your supervisors?	
18.	Meeting Schedules	
	What all meetings do you have to attend in a month? Enlist all in space provided.	
19.	Health Condition Please share about any existing health condition you may have.	
19 a.	How does this physiologic condition impact your work performance (in office and on field)	
20.	Training Enlist some of the training areas to perform your daily job effectively	
21.	What recommendations do you give for improving your work performance?	
22.	Enlist some of the local schemes/policies of the government applicable for Health Department	

SECTION 3			
<i>Instruction: Ask questions 23 to 26 in reference with their office work</i>			
23.	Have you recently lost much sleep over worry?	24.	Have you recently felt constantly under strain?
	<input type="radio"/> Not at all		<input type="radio"/> Not at all
	<input type="radio"/> No more than usual		<input type="radio"/> No more than usual
	<input type="radio"/> Rather more than usual		<input type="radio"/> Rather more than usual
	<input type="radio"/> Much more than usual		<input type="radio"/> Much more than usual
25.	Have you recently been able to enjoy your normal day to day activities?	26.	Have you recently been feeling unhappy and depressed?
	<input type="radio"/> More than normal		<input type="radio"/> More than usual
	<input type="radio"/> Same as usual		<input type="radio"/> About the same as usual
	<input type="radio"/> Less than usual		<input type="radio"/> Less than usual
	<input type="radio"/> Much less than usual		<input type="radio"/> Much less than usual
27.	Have you recently been feeling reasonably happy, all things considered (personal and professional)?	28.	How does present status of your health impact your functioning at the facility level?
	<input type="radio"/> More so than usual		<input type="radio"/> Slightly
	<input type="radio"/> About the same as usual		<input type="radio"/> Moderately
	<input type="radio"/> Less so than usual		<input type="radio"/> Severely
	<input type="radio"/> Much less than usual		<input type="radio"/> Does not affect

29.	How does present status of your health impact your functioning at the field level?	30.	<i>'My work environment/conditions are very healthy and comfortable'</i>	
	<input type="radio"/> Slightly		<input type="radio"/> Strongly Agree	
	<input type="radio"/> Moderately		<input type="radio"/> Agree	
	<input type="radio"/> Severely		<input type="radio"/> Can't say	
	<input type="radio"/> Does not affect		<input type="radio"/> Strongly disagree	
			<input type="radio"/> Disagree	
31.	Are you satisfied with the job?	31 a.	If Not Satisfied with job enlist some of the same	
	<input type="radio"/> Highly Satisfied	31 b.	Suggest some of the possible solutions to improve job satisfaction	
	<input type="radio"/> Satisfied			
	<input type="radio"/> Can't say			
	<input type="radio"/> Highly dissatisfied			
	<input type="radio"/> Not satisfied			
32.	Are you holding any additional charge apart from ANM post?	33.	Have you received any written job description?	
	Yes		<input type="radio"/> Received at the time of joining	
	No		<input type="radio"/> Received later after joining	
	<input type="radio"/> Received an updated one in last three months			
			<input type="radio"/> Didn't receive at all	
34.	Did you receive any recognition awards/rewards?	Yes.....	No.....	

Work planning and supervision

35.	How do you plan your visits to the villages and field area? <i>(Instruction: Tick options applicable (one or more than one))</i>	<input type="radio"/> Randomly	
		<input type="radio"/> Based on pre-set rules (e.g. every sub centre is to be covered every month)	
		<input type="radio"/> Based on performance	
		<input type="radio"/> Based on complaints/enquiry	
		<input type="radio"/> Based on the need/demand	
		<input type="radio"/> As per supervisor's order	
36	Do you have a monthly action plan?	Yes	No
36 a.	If Yes, then ask, Do you get feedbacks upon the same?	Yes	No

36. b.	Are you able to follow your plan?	<input type="radio"/> Always <input type="radio"/> Very often <input type="radio"/> Sometimes <input type="radio"/> Rarely <input type="radio"/> Never	
37.	Is there a village health plan or sub center plan or micro-plan available with you?	Yes	No
Co-ordination with co-workers			
38.	Do you find coordination between your work and with work of male health worker?	Yes	No
Training Details			
39.	Did you ever get any computer training?	Yes	No
40.	<i>I am adequately trained for all the tasks I perform</i>	<input type="radio"/> Strongly Agree <input type="radio"/> Agree <input type="radio"/> Can't say <input type="radio"/> Strongly disagree <input type="radio"/> Disagree	

MPHW-M					
MPHW Code No		Age (Years)			
PHC Name		SC Name			
Location of Sub-center (District/ Mandal/Village)		Nature of posting	Deputation	Permanent	Temporary
Contact number		Date of joining present Sub-centre			
Interview Date		Starting Time		End Time	
Interviewed by		Verified by			
Interviewer signature					

Instructions

- Take time to fill in the interview sheet carefully and thoroughly
- Use a blue/black color pen to fill your responses in the space provided
- Do not overwrite Ask every item mentioned in the sheet
- Write additional remarks in column provided in the end and if need be write clearly on additional blank sheet with clear reference to question number
- Fill the sheet in clear and neat handwriting
- Do not tamper the sheet and submit it in a proper condition with signature

SECTION 1 SOCIO-DEMOGRAPHIC INFORMATION			
S. No	Question	Response	
1.	Education level	10 th standard	
		Intermediate or +2	
		Graduation	
		Post-graduation	
		Diploma course	
		Any other	
2.	What course have you done for MPHW-M position?		
2 a.	Duration of the course		
2 b.	Have you done any additional course(s)?	Yes.....	No.....
3.	Year of completion of MPHW-M course		

		Nuclear.....	Joint.....
4.	Family type		
5.	Marital status	Married	
		Unmarried	
		Divorcee/Separated/Widowed	
5a.	If married/divorcee/separated, then ask: Total Number of children	One	
		Two	
		More than two	
6.	Monthly family income	Self	
		Wife	
		Others	
7.	Where do you stay? (Mention village and Mandal name)		
8.	Mode of transportation *Tick mark against appropriate mode(s) of transportation	1. Walking	
		2. Two-Wheeler (Self driven)	
		3. Two-Wheeler (Pillion)	
		4. Bicycle	
		5. Auto rickshaw	
		6. Bus	
		7. Others (Specify)	

SECTION 2			
9.	Enlist five factors which facilitate you in smoothly carrying out your daily tasks at work (internal and external both)		
10.	Enlist five factors which pose as barrier in smoothly carrying out your daily tasks at work		
11.	Can you mention the schedule wise list of tasks that you would have carried out yesterday? (Probe to understand his definition of time management)		
12.	Enlist five factors which promote effective management of your time		
13.	Enlist five factors which hinder effective management of your time		
13 a.	Enlist some of the challenges in following up of your work plan		
14.	Work profile and functioning		
	Enlist some of your primary roles and responsibilities as MPHW		
	As per actual		
	As per job duty chart		
15.	Work planning and supervision How does a village health plan or sub centre plan or micro-plan help in accomplishing tasks? *Ask if plan is available with the worker		
16.	Records and records keeping		
	16a. Report/Record maintained	16b. Challenges faced	16c. Suggestions on addressing the current issues / challenges
17.	What kind of support do you expect from your supervisors?		
18.	What kind of support do you receive in actual from your supervisors?		
19.	Meeting Schedules		
	What all meetings do you have to attend in a month? Enlist all in space provided.		

20.	Health condition	
	20a. Please share about any existing health condition you may have.	
	20b. How does this physiologic condition impact your work performance (in office and on field)	
21.	Training	
	Enlist some of the training areas to perform your daily job effectively.	
22.	What recommendations do you give for improving your work performance?	
23.	Enlist some of the ways through which you find work coordination with work of ANM.	

SECTION 3					
24.	Have you recently lost much sleep over worry?	25.	Have you recently felt constantly under strain?		
	<input type="radio"/> Not at all		<input type="radio"/> Not at all		
	<input type="radio"/> No more than usual		<input type="radio"/> No more than usual		
	<input type="radio"/> Rather more than usual		<input type="radio"/> Rather more than usual		
	<input type="radio"/> Much more than usual		<input type="radio"/> Much more than usual		
26.	Have you recently been able to enjoy your normal day to day activities?	27.	Have you recently been feeling unhappy and depressed?		
	<input type="radio"/> More than normal		<input type="radio"/> More than usual		
	<input type="radio"/> Same as usual		<input type="radio"/> About the same as usual		
	<input type="radio"/> Less than usual		<input type="radio"/> Less than usual		
	<input type="radio"/> Much less than usual		<input type="radio"/> Much less than usual		
28.	Have you recently been feeling reasonably happy, all things considered (personal and professional)?	29.	Do you have any existing health condition?		
	<input type="radio"/> More than usual				
	<input type="radio"/> About the same as usual				
	<input type="radio"/> Less than usual				
	<input type="radio"/> Much less than usual				
		Yes		No	

30.	How does present status of your health impact your functioning at the facility level?		31.	How does present status of your health impact your functioning at the field level?	
	<input type="radio"/> Slightly			<input type="radio"/> Slightly	
	<input type="radio"/> Moderately			<input type="radio"/> Moderately	
	<input type="radio"/> Severely			<input type="radio"/> Severely	
	<input type="radio"/> Does not affect			<input type="radio"/> Does not affect	
32.	'My work environment/conditions are very healthy and comfortable'		33.	Are you satisfied with the job?	
	<input type="radio"/> Strongly Agree			<input type="radio"/> Highly Satisfied	
	<input type="radio"/> Agree			<input type="radio"/> Satisfied	
	<input type="radio"/> Can't say			<input type="radio"/> Can't say	
	<input type="radio"/> Strongly disagree			<input type="radio"/> Highly Dissatisfied	
	<input type="radio"/> Disagree			<input type="radio"/> Dissatisfied	
34.	Are you holding any additional charge apart from MPH-W-M post?		35.	Have you received any written job description?	
	Yes	No		<input type="radio"/> Received at the time of joining	
	If Yes, Since When?			<input type="radio"/> Received later after joining	
				<input type="radio"/> Received on demand/ upon asking	
		<input type="radio"/> Received an updated one in last three months			
		<input type="radio"/> Didn't receive at all			
36.	Did you receive any recognition awards/rewards?			Yes.....	No.....

AWWs			
AWW Code No			
Age (Years)			
Location of AWC (District/Mandal/Village)			
Centre type	Mini AWC	AWC	
Contact number			
Year of joining present AWC			
Interview Date			
Starting time		Ending Time	
Interviewed by			
Verified by			

Instructions

- Take time to fill in the interview sheet carefully and thoroughly
- Use a blue/black color pen to fill your responses in the space provided
- Do not overwrite Ask every item mentioned in the sheet
- Write additional remarks in column provided in the end and if need be write clearly on additional blank sheet with clear reference to question number
- Fill the sheet in clear and neat handwriting
- Do not tamper the sheet and submit it in a proper condition with signature

SECTION 1 SOCIO-DEMOGRAPHIC INFORMATION			
S. No	Question	Response	
1.	Education level	<input type="radio"/> 10 th standard <input type="radio"/> 12 th standard <input type="radio"/> Graduation <input type="radio"/> Any other (Mention)	
2.	Family type	Nuclear	Joint

3.	Marital status	<input type="radio"/> Married <input type="radio"/> Unmarried <input type="radio"/> Divorced/Separated/Widowed
3 a.	If married/divorced/separated, then ask: Total Number of children	<input type="radio"/> One <input type="radio"/> Two <input type="radio"/> More than two
4.	Monthly family income	<input type="radio"/> Self <input type="radio"/> Husband <input type="radio"/> Others
5.	Where do you stay? (Mention village and taluka name)	
6.	Mode of transportation	<input type="radio"/> Walking <input type="radio"/> Two-Wheeler (Self driven) <input type="radio"/> Two-Wheeler (Pillion) <input type="radio"/> Bicycle <input type="radio"/> Auto rickshaw <input type="radio"/> Bus <input type="radio"/> Others (Specify)

SECTION 2		
7.	Enlist five factors which facilitate you in smoothly carrying out your daily tasks at work (internal and external both)	
8.	Enlist five factors which pose as barrier in smoothly carrying out your daily tasks at work	
9.	Can you mention the schedule wise list of tasks that you would have carried out yesterday? *(Probe to understand her definition of time management)	
10.	Enlist factors which promote effective management of your time (Instruction: Probe for minimum of one and maximum of five factors)	

11.	Enlist factors which hinder effective management of your time (Instruction: Probe for minimum of one and maximum of five factors)	
11 a.	Enlist some of the challenges in following up of your work plan	

12.	Work profile and functioning Enlist some of your primary roles and responsibilities as AWW <i>As per job duty chart</i> <i>Additional work (Other than duty chart)</i>		
13.	Records and records keeping		
	13.a Report / Record maintained	13.b Challenges faced	13.c Suggestions on addressing the current issues / challenges

14.	What kind of support do you expect from your supervisors?	
14 a.	What kind of support do you receive in actual from your supervisors?	
15	Meeting Schedules	
	What all meetings do you have to attend in a month? Enlist all in space provided.	
16	Health condition Please share about any existing health condition you may have.	
16 a.	How does this physiologic condition impact your work performance (in office and on field)	
17.	Training Enlist some of the training areas to perform your daily job effectively	
18.	What recommendations do you give for improving your work performance?	
19.	Enlist some of the local schemes/policies of the government applicable for AWC centres.	

SECTION 3

20.	Have you recently lost much sleep over worry?	<input type="radio"/> Not at all <input type="radio"/> No more than usual <input type="radio"/> Rather more than usual <input type="radio"/> Much more than usual
21.	Have you recently felt constantly under strain?	<input type="radio"/> Not at all <input type="radio"/> No more than usual <input type="radio"/> Rather more than usual <input type="radio"/> Much more than usual
22.	Have you recently been able to enjoy your normal day to day activities?	<input type="radio"/> More than normal <input type="radio"/> Same as usual <input type="radio"/> Less than usual <input type="radio"/> Much less than usual
23	Have you recently been feeling unhappy and depressed?	<input type="radio"/> More than usual <input type="radio"/> About the same as usual <input type="radio"/> Less than usual <input type="radio"/> Much less than usual
24	Have you recently been feeling reasonably happy, all things considered?	<input type="radio"/> More than usual <input type="radio"/> About the same as usual <input type="radio"/> Less than usual <input type="radio"/> Much less than usual
25	How does present status of your health impact your functioning at the facility level?	<input type="radio"/> Slightly <input type="radio"/> Moderately <input type="radio"/> Severely <input type="radio"/> Does not affect
26	How does present status of your health impact your functioning at the field level?	<input type="radio"/> Slightly <input type="radio"/> Moderately <input type="radio"/> Severely <input type="radio"/> Does not affect

27	<i>'My work environment/conditions are very healthy and comfortable'.</i>	<input type="radio"/> Strongly Agree <input type="radio"/> Agree <input type="radio"/> Can't say <input type="radio"/> Strongly disagree <input type="radio"/> Disagree	
28	Are you satisfied with the job?	<input type="radio"/> Highly Satisfied <input type="radio"/> Satisfied <input type="radio"/> Can't say <input type="radio"/> Highly Dissatisfied <input type="radio"/> Dissatisfied	
28 a.	If not satisfied with job, enlist some of the reasons for the same.		
28 b.	Suggest some of the possible solutions to improve job satisfaction.		
29	Do you have any written job description? *Ask AWW to get the copy of it	<input type="radio"/> Received at the time of joining <input type="radio"/> Received later after joining <input type="radio"/> Received on demand/ upon asking <input type="radio"/> Received an updated one in last three months <input type="radio"/> Didn't receive at all	
30	Did you receive any recognition awards/rewards?	Yes	No
Work planning and super visioning			
31	How do you plan your work including home visits?	<input type="radio"/> Randomly <input type="radio"/> Based on pre-set rules <input type="radio"/> Based on performance <input type="radio"/> Based on complaints/enquiry <input type="radio"/> Based on the need/demand <input type="radio"/> As per supervisor's instructions	
32.	Do you have a monthly action plan?	Yes	No

32 a.	If monthly action plan is available then ask: Are you submitting the plan to your Supervisor	Yes	No
32 b.	If Yes, then ask: Do you get feedbacks upon the same?	Yes	No
33.	Are you able to follow your plan?	<input type="radio"/> Always <input type="radio"/> Very often <input type="radio"/> Sometimes <input type="radio"/> Rarely <input type="radio"/> Never	
Co-ordination with co-workers			
34.	Do you have any coordination meetings with ANM/ASHA worker?	Yes	No
Training Details			
35.	Did you ever get any computer training?	Yes	No
36.	<i>'I am adequately trained for all the tasks I perform'</i>	<input type="radio"/> Strongly Agree <input type="radio"/> Agree <input type="radio"/> Can't say <input type="radio"/> Strongly disagree <input type="radio"/> Disagree	

ASHA FGD GUIDE

BASIC PROFILE OF THE PARTICIPANTS							
Names of Participants	Age	Education	Area Served	ASHA since how many years	Last two months incentives		Place of stay
					Month 1	Month 2	

1. Share about what are your role and responsibilities as ASHA?
2. What all activities are your priority activities as ASHA?
3. Which of the following activities take most of your time?

3a

Home visits

3b

Attending village health and nutrition day (VHNDs)

3c

Visit to health facility

3d

Holding village level meeting

3e

Maintain records
4. How often you are making home visits and what all the activities you are doing during your home visits?
5. What kind of activities incentivize you more as ASHA?

5a.

Does ASHA work presents you with an external opportunity for work?
6. Share about your role in coordination with Anganwadi worker/Anganwadi Helper.
7. What are the motivating/facilitative factors for you to work as ASHA? (Probe for community support, supervisory support).
8. What are some of the barriers/challenges that you experience in performing your role and responsibilities?
9. Give some of the suggestions to help you perform your role and responsibilities better.
10. Share about trainings that you have undergone. (Ask for topics of the training).
11. Do you have any other things to discuss? Please explain.

OBSERVATION SCHEMA: FLHWs and AWWs

ANMs		
Category	Sub category	Activity
Travel	Home to Field/Village	
	Field/Village to Home	
	Home to Centre/Facility	
	Centre/Facility to Home	
	Field/Village to Field/Village	
	Centre/Facility to Field/Village	
	Field/Village to Centre/Facility	
Home Visits	Health	Counselling/Awareness building/Talking to house member about health aspects/Follow up
		Medicine distribution
		General health aspect/Seasonal diseases (Fever, Diarrhoea, cold etc)
		ANC woman house visit
		PNC mother house visit
		Child health activity (examination etc)
		Any other
Paperwork	Registers	Water chlorination register
		ANC register
		Birth and Death register / Maternal Death
		Household survey register
		Child Immunization Register & Infant Death
		TT 5 years, 10 years, 16 years register
		Sterilization register
		Eligible couple register
		Oral pills register
		IUD (Intra Uterus Device) Register
		CC(Condoms) Register
		Communicable disease register
		Death reports Register
		0-5 years children register
		Vitamin A register
		Expected date of delivery (EDD) Register
		Sanitation register

ANMs		
		TB Register
		Stock Register
		Any other
		Computer Data Entry
		Reports
		Beneficiary Records
IEC activities among group(s) or at community level		Any other
		Maternal Health
		Child Health
		Family Planning
		Nutrition
		Communicable diseases
		Non-Communicable diseases
		Other health related
		Mobilization
		Mobilization for any camp / event related to health
Service Delivery & Counselling/Discussing with Patients/Family members/ Community members	Maternal Health	Any other
		Tracking & Registration of pregnancy
		ANC Check up - Routine
		ANC for pregnant women lapsed during NHD
		Referral and accompanying
		Conducting delivery at SC level
		Registration of birth
		Registration of child/maternal death
		Post-natal visit - Routine
		Post-natal visit - Indicated by ASHA / AWW or not present in NHD
		Counselling/Discussing with Patient/Family member/Community member
		Any other
	Child Health	Assessment of sick child and referral or accompanying
		Identification of children who missed immunization and immunizing them
		Any paediatric care activity on the spot
		Counselling/Discussing with Patient/Family member/Community member
		Any other

ANMs		
	Family Planning	Distributing contraceptives
		IUCD insertion
		Condom distribution
		Identification and referral for permanent sterilization
		Permanent sterilization (tubectomy/vasectomy)
		Counselling/Discussing with Patient/Family member/Community member
		Any other
	Nutrition	IFA distribution
		Examining and assessing malnutrition
		Referral and accompanying
		Counselling/Discussing with Patient/Family member/Community member
		Any other
	Communicable diseases (TB, HIV, Leprosy etc)	Identifying / Assessing
		Referral and accompanying
		Counselling/Discussing with Patient/Family member/Community member
		Any other
	Seasonal Diseases/Epidemic Outbreaks (like Fever, Cold, Dysentery etc)	Identifying/Assessing
		Referral and accompanying
		Counselling/Discussing with Patient/Family member/Community member
		Any other
	Curative Care	First aid or curative care on the spot (burns, snakebite or any other)
		Any other
	Blindness/Cataract	Identifying/Assessing
		Referral and accompanying
		Any other

ANMs		
	Non communicable diseases; NCDs (Diabetes, Blood Pressure, Heart related etc)	Identifying/Assessing
		Referral and accompanying
		Counselling/Discussing with Patient/Family member/Community member
		Any other
Camp work		Sterlization camp
		Health camp
		Any other
School Health	IEC	Awareness generation/Peer education
	Service delivery & counselling	Immunization completion
		Eye screening of children
		Identification of cases of malnutrition and referral
		Counselling
		Any other
Adolescent Health	Service delivery & counselling	De-worming
		Iodine deficiency check up
		Screening and identification
		Counselling
	IEC	Awareness generation/Peer education
	Any other	
Nutrition and Health Day (NHD 1 & 2)	IEC	Health and nutrition education
		Maternal and child care
	Service	Routine immunization
		Vitamin A doses administration
		IFA supplementation
		ANC
		PNC
	Any other	

ANMs		
Universal Immunization Day	Admin	Preparation work (preparing work plan, estimating beneficiaries and logistics, preparing due list of expected beneficiaries in coordination with AWW/ASHA)
		Equipment and work place set up
	Service	Administering Vitamin A syrup
		Immunize pregnant women with TT
		Immunize children as per the schedule
	Paperwork	Record maintenance
	Any other	
Meetings / Discussions with co-workers or village community		Male Worker/MPHW-M
		ASHA
		AWW
		With village community
		Any other
Meetings / Discussions with seniors		Supervisors
		Medical Officer MO
		Any other
Trainings		
Personal Work	Telephonic communication	
	Non-telephonic	
	Any other	
Admin		Equipment and work place set up
		Re-stocking supplies
		House to house survey
		Any other
Non-health but work related activities	Related to Health Department	
	Related to other department (Examination duty etc)	
	External Agency (NGO related etc)	
	Any other	
Waiting	for Patients	
	for Staff	
	for Others	
Any other		

MPHW-M		
Category	Subcategory	Activity
Travel	Home to Field/Village	
	Field/Village to Home	
	Home to Centre/Facility	
	Centre/Facility to Home	
	Field/Village to Field/Village	
	Centre/Facility to Field/Village	
	Field/Village to Centre/Facility	
Home visits	Health	Counselling/Awareness building/Talking to house member about health aspects/Follow up
		Medicine distribution
		General health aspect/Seasonal diseases (Fever, Diarrhoea, cold etc)
		ANC woman house visit
		PNC mother house visit
		Child health activity (examination etc)
		Any other
Paperwork	Registers	ANC register
		Household survey register
		Birth and death(Maternal death)
		Child Immunization Register
		Infant death register
		TT 5years,10years,16 years register
		Eligible couple register
		Sterilization register
		IUD register
		Oral pills register
		CC(Condoms) Register
		Communicable disease register
		Death reports Register
		Chlorinization Register
		0-5 years children register
		Vitamin A register
		MF 2 (Malaria) register
		TB register
		Stock Register
		Sanitation register
		Expected date of delivery (EDD) register
	Computer Data Entry	
	Reports	

MPHW-M		
	Beneficiary records	
	Annual village health plan preparation and submission (in association with ANM, VHSNC, PRIs)	
	Any other	
	Supervisory visits / tour visits records	
IEC activities among group(s) or at community level	National Vector Borne Disease* Control Programme (NVBDP) *Malaria/Filaria/Kala Azar/Dengue/Chickengunya/ Acute Encephalitis etc.	
	Revised National Tuberculosis Control Programme (RNTCP)	
	National Leprosy Eradication Programme (NLEP)	
	Universal Immunization Programme (UIP)	
	Reproductive and Child Health Programme (RCH)	
	Communicable diseases	
	Non communicable diseases (NCDs) and others	
	Nutrition	
Service Delivery & Counselling/ Discussing with Patients/Family members/Community members	National Vector Borne Disease* Control Programme (NVBDP) *Malaria/Filaria/Kala Azar/Dengue/Chickengunya/ Acute Encephalitis etc.	Early diagnosis and treatment
		Deciding/locating dumping sites for insecticides and spraying activity
		Referral and accompanying
		Any other
	National Leprosy Eradication Programme (NLEP)	Identification of cases and tracking of patients
		Referral of suspected case(s) to PHC
		Assisting leprosy disabled people in self-care & referral to PHC
		Any other
	National blindness control programme (NBCP)	Identifying / Assessing
		Referral and accompanying
		Any other
	Revised National Tuberculosis Control Programme (RNTCP)	Identifying / Assessing and collection of samples
		Tracking of patients
		Referral and accompanying
		Any other

MPHW-M		
	Universal Immunization Programme (UIP)	Assistance to health worker for administering all UIP vaccines & provisioning of Vitamin A prophylaxis
		Any other
	Reproductive and Child Health Programme (RCH)	Distribution of contraceptives to desirous couples (& assist ASHA/ANMs in doing the same)
		Linking prospective acceptors of sterilization with health facility
		Follow up services to male family planning acceptors
		Identification and referral of cases with RTI/STI
		Care and treatment for new-born and childhood illnesses
		Any other
	Non-Communicable diseases, Mental Health and Blindness/Cataract	House to house survey for detection and enlisting of cases of hearing and visual impairment
		Mobilizing community members for screening camps
		Identification and referral of common mental illnesses and Epilepsy cases
		Promoting formation and registration of 'Self Health Care Group of Elderly Persons
		Oral Health education, first aid and referral of cases with oral health problems
		Regular salt testing through/with ASHAs at household level
		Environment Sanitation
		Chlorination of drinking water sources
		Any other
	Curative care	First aid or curative care on the spot (burns, snakebite or any other)
		Any other
	Nutrition	Identify cases of Low Birth Weight and malnutrition
		Give the necessary treatment and advice or refer them
		Any other

MPHW-M		
	Vital Event Registration or reporting	Births registration
		Death registration
		Reporting outbreak of diseases
		Any other
	Communicable diseases (TB, HIV, leprosy etc)	Identifying / Assessing
		Referral and accompanying
		Counselling/Discussing with Patient/Family member/Community member
		Any other
	Seasonal Diseases/Epidemic Outbreaks (like Fever, Cold, Dysentery etc)	Identifying/Assessing
		Referral and accompanying
		Counselling/Discussing with Patient/Family member/Community member
		Any other
Camp work		Sterlization camp
		Health camp
		Any other
School Health	IEC	Awareness generation/Peer education
	Service delivery & counselling	Immunization completion
		Eye screening of children
		Identification of cases of malnutrition and referral
		Any other
Adolescent Health	IEC	Awareness generation /Peer education
	Service delivery & counselling	De-worming
		Iodine deficiency check up
		Screening and identification
		Counselling
Nutrition and Health Day (NHD 1 & 2)	IEC	Health and nutrition education
		Maternal and child care
	Service	Routine immunization
		Vitamin A doses administration
		IFA supplementation
		ANC
		PNC
	Any other	

MPHW-M		
	Admin	Preparation work (preparing work plan, estimating beneficiaries and logistics, preparing due list of expected beneficiaries in coordination with AWW/ASHA)
		Equipment and work place set up
Universal Immunization Day	Service	Administering Vitamin A syrup
		Immunize pregnant women with TT
		Immunize children as per the schedule
	Paperwork	Record Maintenance
	Any other	
Meetings / Discussions with co-workers or village community		ANM
		ASHA
		AWW
		With village community
		Any other
Meetings / Discussions with seniors		Supervisors
		Medical Officer MO
		Any other
Trainings		
Personal Work	Telephonic communication	
	Non-telephonic	
	Any other	
Admin		Equipment and work place set up
		Re-stocking supplies
		Supervision of work of spray squads under NVBDCP
		House to House Survey
		Any other
Non-health but work related activities	Related to Health Department	
	Related to Other department (Examination Duty etc)	
	External Agency (NGO related etc)	
	Any other	
Waiting	for Patients	
	for Staff	
	for Others	
Others		

AWWs		
Category	Subcategory	Activity
Travel	Home to Field/Village	
	Field/Village to Home	
	Home to AWC	
	AWC to Home	
	Field/Village to Field/Village	
	AWC to Field/Village	
	Field/Village to AWC	
Paperwork	Registers	Pre primary education register
		Immunization register
		Monthly and yearly reports register
		Vitamin A Half yearly dose register
		Children weight record register
		Pregnant women register
		Family details register
		Attendance register for pregnant and lactating women
		Pregnant women and delivery register
		Anganwadi attendance register
		Population details register
		Indiramma Amrutha Hastham Register (Arogya Lakshmi)
		Referral register
		Home Visits Register
		Arogyalakshmi Committee Members Register
		Arogyalakshmi stock register
		Food Care Stock register (FCR)
		Monthly provisions register
		Stock register
		THR (Take Home Ration) register
		Household survey register
	Reports	
	Beneficiary Records	
	Any other	
IEC activities among group(s) or at community level	Nutrition	
	Sanitation	
	Child Health	
	Adolescent health	Personal hygiene, Reproductive health etc
	Maternal health	
	Schemes and government policies related like ICDS	
	Mobilization	Mobilization for any camp / event related to health & nutrition
	Any other	

AWWs		
Service Delivery & Counselling/Discussing with Patients/Family members/Community members	Early childhood education (ECE)/ Pre-school non-formal education (NFE)	School readiness program
		Delivery of school teaching
		Reading
		Story telling activity
		Interactive outdoor indoor games
		Assessment of development and learning abilities using ECCE card
		Any other
	Supplementary nutrition program (SNP)	Distribution of cooked meals and take home ration (THR)
	Child health nutrition	Weight recording of Children (0-3 years*) *Monthly
		Weight recording of children (3-6 years**) ** Quarterly
		Plotting and identification of growth faltering on chart
		Follow up of children with SAM rehabilitated at NRCs
		Monitoring all enrolled children
		Growth monitoring and promotion of those children who were unable to come to AWC at their homes
		Guidance and counselling to caregivers of children with growth faltering
	Health Services with AWW as facilitator	Any other
		Identification of children, pregnant and lactating mothers who require medical attention
		Immunization and micronutrient supplementation
		Health check-up
		Anaemia control in adolescent girls (supervised administration of IFA)
		Referral
		Basic primary medical care for first line treatment
Home Visits	Child Health	Counselling to pregnant women and lactating mothers
		Any other
	Child Health	Identify pre-primary children
		Home based guidance and counselling
	Maternal Health	Identify ANC women for nutritional support
		Home based guidance and counselling
	Adolescent Health	Educate / meet adolescent girls
		Home based guidance and counselling
	Any other	

AWWs		
Nutrition and Health Day (NHD 1 & 2)	General arrangements	Mobilizing community women and children
		Making suitable arrangement for space to carry out ANC/PNC
		Preparing list of beneficiaries who should attend session (in consultation with ASHA)
		Any other
	IEC	Health and nutrition education
		Maternal and child care
		Any other
	Service delivery	Distribution of take home ration (THR)
		Monitor growth of dropped out children (from routine session)
		Any other
	Any other	
Early Childhood care and education (ECCE) day - Monthly	IEC	Child health and nutrition
		Any other
	Paperwork	Preparing list of children with delayed developmental milestones (0-6 years)
		Any other
	Any other	
Meetings / Discussions with co-workers or village community		ANM
		ASHA
		Male worker/MPHW-M
		With village community
		Any other
Meetings / Discussions with seniors		Supervisors
		Any other
Trainings		
Personal Work	Telephonic communication	
	Non-telephonic	
	Any other	
Admin & others		Equipment and work place set up
		Re-stocking supplies
		Cooking meals when no AW Helper available
		House to house survey
		Any other
Work related other activities	Related to ICDS	
	Other departments	
	External Agency (NGO related etc)	
	Any other	
Waiting	for beneficiaries (Children, Women, Adolescents)	
	for Staff	
	for Others	
Others		

OFFICIALS INTERVIEW SCHEDULES

Introduction Note

Namaste! I want to thank you for giving your valuable time to meet us today. I am(Name)..... working at the Centre for Economic and Social Studies as ... (Designation)..... The organization I work with is a Research Institute that conducts studies on various social issues like health, nutrition, education, poverty, water and sanitation etc. The purpose of this interview is to seek your opinions on the motivation and priority given by ANMs/MPHW-M, AWWs and ASHAs in line with their job description. We are hoping that the results from the study will contribute to health policy level changes that can improve the time utilization by frontline health workers in delivering various services to rural populations. I would like to reiterate that the information shared by you will only be used for the current study. We may include some quotes of yours in the study but your personal details will not be mentioned anywhere in the report. Interview data will not be shared with anybody except for TAM core project staff. The interview may take around 30 minutes and we seek your cooperation in this regard.

To guide our interview, I have a certain set of questions which I will be asking you. Please feel free to answer or decline the questions.

Name of the District:

Date of IDI:

Date/Year of joining current position:

Contact Number of the Official:

Name of the Interviewer:

DMHO

1. In your opinion, what factors determine the functioning of various cadre of health workers as per their job description? *(Ask specifically with respect to following three cadres)*

a) ANMs

b) Male MPHWS-M

c) ASHAs
2. Do you find coordination between the roles and responsibilities of these field level workers? Could you please justify with certain examples? *(Probe for overlaps, ANM Vs ASHAs; ANM 1 Vs ANM 2, ANM vs Male Worker,)*
3. What are the various factors that are likely to impact the implementation of the regular work plan & consequential workload of these health workers? *(Probe: New Government initiatives/priorities, visits of higher officials to the field/facility, local festivals, political campaigns, elections or any other reasons)*

4. In your opinion, how are the services of these workers are being utilized in terms of staff availability, reach of beneficiaries, and quality of services offered to ensure best performance?
5. What have been some of the key strategies adopted in the program which has helped in the effective functioning of these workers? (Probe: Trainings & educational curriculum, Monitoring mechanisms; simplified reporting (if applicable); convergence between WCD and Health departments, supervision, computerization etc)
6. What are your recommendations to improve the performance of these workers? (Probe: Approach for service delivery; supply and logistic support, monitoring system, supportive supervision, capacity building, with respect to specific health programs: national and state etc.)

SPHO

1. Could you please tell us with reference to the cluster you are in-charge of, whether the approved number of frontline health workers positions is filled for all the existing PHCs?
 - a) If yes, how is the role of each frontline health worker (ANM1/ANM2/MPHW-M) defined and how is it being ensured that they perform their specific responsibilities?
 - b) If not, how is the workload of these frontline health workers and the services they provide getting affected in the field and at the facility due to the inadequate number of staff?
2. What role can a district –sub-district and mandal level health system play in the effective functioning of frontline health workers & ASHAs as per their job description? (Probe: Appreciation/rewards/review meetings/supportive supervision, monitoring, trainings, convergence between various departments etc.)
3. How do you see the role of ASHAs wrt to health service delivery (Probe coordination/ complementarity with ANMs-Male workers)
4. What are the various factors that can impact the implementation of the regular work plan of these health workers? (Probe: Government initiatives/priorities, visitors to the field, local festivals, political campaigns, elections or any other reasons)
 - a) How can this issue be addressed so that the ongoing activities of the health workers and the services they provide for mothers and children are not compromised?
5. What are your recommendations to improve the performance of these workers?

MO

1. In your experience as MO, could you please list five factors that are enabling the functioning of the health workers including ANMs, Male MPHWS-M & ASHAs as per their job description? (Probe for certain examples at the facility and in the field)
2. Could you please also list five barriers to the effective functioning of the health workers including ANMs, Male MPHWS-M & ASHAs as per their job description? (Probe for certain examples at the facility and in the field)

3. Elaborate upon the role of ASHAs in district health system and health service delivery.
(Probe wrt to her work in coordination with ANMs/Male worker)
4. What are various factors that can impact the implementation of the regular work plan & consequential work load of these health workers?
(Probe: New Government initiatives/priorities, visits of higher officials to the field/facility, local festivals, political campaigns, elections or any other reasons)
5. What are some of the lessons learned in the program that will enable effective functioning of these health workers and help optimize their performance in the field and at the facility?
(Probe: Review meetings, regular monitoring, Infrastructure/technology, need-based training, improved logistics or effective supply chain management, coordination between WCD and Health departments)
6. What are your recommendations to improve the performance of these workers?
(Probe: accreditation, rewards, simplified reporting, adequate staff, program strategy, trainings etc.)

HEALTH SUPERVISOR

1. As a Health Supervisor who has had experience working with ANMs, Male MPHWS-M what do you feel are some of the factors that impact performance of these workers at workplace?
(Probe: Motivation aspect, Contractual vs permanent worker, local or non-local, monetary and non-monetary incentives, transport facility, geographical conditions such as urban/ rural/tribal etc)
2. Do you find any work coordination of ANMs with the following health workers in the provision of Health services? Elaborate your response
 - a) ASHAs
 - b) Male worker
3. What are the various factors that are likely to impact the implementation of the regular work plan & consequential workload of these health workers? (Probe: New Government initiatives/priorities, visits of higher officials to the field/facility, local festivals, political campaigns, elections or any other reasons)
4. How have you been able to ensure overall effective functioning of these health workers?
(Probe: Regular monitoring and supportive supervision, technical assistance, coordination between WCD and Health department etc)
5. What are your recommendations to improve the work performance of these workers?
(Probe: Improved Infrastructure/technology, improved logistics or effective supply chain management,)

PROJECT DIRECTOR (ICDS)

1. In your opinion, to what extent are the services of AWWs being utilized in the villages for addressing health and nutritional needs of mothers, children and adolescent girls? *(Probe for estimated Vs coverage – pregnant women, lactating women,, preschool children)*
2. What have been some of the challenges being faced by the AWWs to perform their work in line with their job description? *(Probe: scattered houses in tribal hamlets, poor infrastructure of AWC, maintenance of large number of registers, time management for various tasks, AWWs involvement in other programs not assigned by WCD etc)*
3. How do you think the regular work plan of AWWs can be improved in order to reduce their workload? *(Probe on various influencing factors that impede the implementation of her regular work plan: Introduction of new Government initiatives, higher official visits to the field, Local festivals, Political campaigns, and Elections etc.)*
4. Share about ICDS Scheme/AWWs coordination with Health department workers.
5. What have been some of the key strategies adopted in the program that helped in the effective functioning of these workers?
(Probe: Trainings, Monitoring mechanisms; convergence with Health departments for VHND)
6. What are your recommendations to improve the performance of these workers? *(Probe: Approach for service delivery; supply and logistic support, monitoring system, supportive supervision, capacity building etc.)*

CDPO (ICDS)

1. How do AWWs develop their monthly work schedule? *(Probe: Plan based on the job description; Plan based on the priorities for the month; Plan based on the instructions provided by the Supervisor or anyone else in the sector meetings)*
2. What have been some of the challenges faced by the AWWs in implementing the work plan as agreed and approved by her supervisor? *(Probe: Inadequate capacity of the AWWs; poor monitoring of her work; lack of supportive supervision; high workload; local festivals; new government programs; political campaigns; elections and any other reasons)*
3. Could you please suggest some ways by which the above challenges to the AWWs work performance can be minimized?
4. What are some of the key strategies adopted in the program to help in the effective functioning of these workers? *(Probe: Trainings; Monitoring mechanisms; convergence with Health departments for VHND; supply and logistic support, etc.)*
5. Would you have any specific recommendations to make regarding the service delivery approach in the program that can provide better program results?

ICDS SUPERVISOR

1. Share about importance of your role as supervisor.

a) How many AWWs & AWCs you have to supervise?

b) How do you plan the same?

(Probe: Plan based on AWWs monthly work plan; Plan based on targets for the month; Plan based on priorities of the block and/or any other reason)

2. What have been some of the challenges faced by AWWs in implementing the work plan as agreed and approved by you? *(Probe: Inadequate capacity of the AWWs; high workload; local festivals; new government programs; political campaigns; elections and/or any other reasons)*

3. Could you please suggest some ways by which the above challenges to the AWWs work performance can be minimized?

4. Would you have any specific recommendations to make regarding the service delivery approach in the program that can provide better program results? *(Probe: Ongoing supportive supervision; trainings and refresher trainings; supply and logistic support; community involvement; service delivery approach; improved convergence between WCD and Health department etc.)*

ANNEXURE 2

TAM DISTRICTS HUMAN RESOURCE PROFILE (ANMs, MPHW-M, ASHAs)

SRIKAKULAM

STATEMENT SHOWING THE CADRE STRENGTH PARTICULARS OF 1ST ANM & 2ND ANMs AS ON 04.05.2016 IN SRIKAKULAM DISTRICT

Sl.No.	Name of the Cluster	Name of the PHC	1st ANMs			2nd ANMs		
			Sanctioned	In-position	Vacant	Sanctioned	In-position	Vacant
1.	Amadalavalasa	Dusi	6	3	3	6	5	1
		Akkulapeta	5	3	2	5	5	0
		Thogaram	4	1	3	4	4	0
		Guttavalli	5	5	0	5	4	1
		L.N.Peta	7	6	1	7	5	2
		Sarubujili	7	6	1	7	5	2
		Cluster Total	34	24	10	34	28	6
2.	Sompeta	Kanchili	5	5	0	5	3	2
		M.S.Palli	5	4	1	5	5	0
		Battigalluru	5	3	2	5	5	0
		Korlam	7	5	2	7	7	0
		Cluster Total	22	17	5	22	20	2
3.	Ichapu-ram	Koligam	6	4	2	6	5	1
		Ichapuram(Rural)	6	5	1	6	5	1
		Cluster Total	12	9	3	12	10	2
4.	Kotabommali	S.Bommali	3	3	0	3	3	0
		Kothapalli	7	6	1	7	7	0
		Borubadra	4	3	1	4	3	1

		Cluster Total	14	12	2	14	13	1
5.	N.Peta	Makivalasa	7	6	1	7	6	1
		Tilaru	7	5	2	7	7	0
		Polaki	7	7	0	7	6	1
		Guppidipeta	6	6	0	6	5	1
		Urlam	5	5	0	5	4	1
		Cluster Total	32	29	3	32	28	4
6.	Budithi	Jalumuru	6	6	0	6	6	0
		Atchutapuram	7	6	1	7	7	0
		Saravakota	11	9	2	11	9	2
		Cluster Total	24	21	3	24	22	2
7.	Palasa	Rentikota	9	9	0	9	9	0
		Akkupalli	4	4	0	4	3	1
		V.Kotturu	4	4	0	4	4	0
		Karajada	4	2	2	4	2	2
		Govindapuram	4	4	0	4	3	1
		Venkatapuram	5	4	1	5	5	0
		Cluster Total	30	27	3	30	26	4
8.	Haripuram	Siripuram	4	3	1	4	3	1
		Budumbocolony	4	3	1	4	3	1
		Mandasa	8	7	1	8	7	1
		Cluster Total	16	13	3	16	13	3
9.	Pathapatnam	Baidalapuram	7	6	1	7	6	1
		Ganguwada	7	7	0	7	5	2
		Chapara	3	2	1	3	2	1
		Meliaputti	6	5	1	6	5	1
		Hiramandalam	9	6	3	9	7	2
		Chorlangi	4	4	0	4	4	0
		Cluster Total	36	30	6	36	29	7

10	Kotturu	Kurigam	9	8	1	9	8	1
		Bhamini	3	3	0	3	3	0
		Battili	3	2	1	3	3	0
		Baleru	4	4	0	4	3	1
		Marripadu	5	5	0	5	2	3
		Cluster Total	24	22	2	24	19	5
11	Rajam	Pogiri	6	5	1	6	5	1
		Boddam	8	7	1	8	7	1
		R.Amadalavalasa	12	12	0	12	11	1
		Vangara	9	8	1	9	9	0
		Cluster Total	35	32	3	35	32	3
12	Tekkali	K.Kotturu	10	8	2	10	9	1
		Nandigam	11	11	0	11	11	0
		D.G.Puram	3	3	0	3	3	0
		Nowpada	3	2	1	3	3	0
		Cluster Total	27	24	3	27	26	1
13	RIMS Srikakulam	Etcherla	8	8	0	8	8	0
		Ponnada	7	6	1	7	6	1
		Singupuram	13	11	2	13	12	1
		Gara	4	4	0	4	1	3
		Srikurmam	7	5	2	7	8	-1
		Calingapatnam	3	3	0	3	1	2
		Cluster Total	42	37	5	42	36	6
14	Kaviti	Borivanka	4	4	0	4	3	1
		Rajapuram	4	4	0	4	4	0
		Manikyapuram	3	1	2	3	1	2
		Belgam	4	3	1	4	4	0
		Cluster Total	15	12	3	15	12	3
15	Ranastalam	Patarlapalli	14	12	2	14	12	2
		Laveru	6	5	1	6	5	1
		Murapaka	6	6	0	6	5	1
		Cluster Total	26	23	3	26	22	4

16	Ponduru	Tadivalasa	6	6	0	6	5	1
		S.Kavity	14	12	2	14	12	2
		Kintali	8	8	0	8	8	0
		G.Sigadam	10	10	0	10	8	2
		Cluster Total	38	36	2	38	33	5
17	Seethampeta	Kusimi	6	5	1	6	3	3
		Donbai	7	6	1	7	7	0
		Cluster Total	13	11	2	13	10	3
18	AH Palakonda	Annaram	4	4	0	4	3	1
		M.Singapuram	4	4	0	4	3	1
		Veeraghattam	7	5	2	7	7	0
		Bitiwada	6	6	0	6	6	0
		Burja	4	4	0	4	3	1
		Cluster Total	25	23	2	25	22	3
19	Other Institutions	UFWC Srikakulam	6	6	0	6	0	6
		UFWC Palakonda	3	2	1	3	2	1
		UFWC Tekkali	3	3	0	3	3	0
		UFWC Ichapuram	1	1	0	1	1	0
		UFWC Total	13	12	1	13	6	7
		Grand Total:	478	414	64	478	407	71

CHNC AND PHC WISE MPHWM POSITION IN SRIKAKULAM DISTRICT AS ON 04-05-2016.					
S.No	Name of CHNC	Name of PHC	No. of MPHWM Sanctioned	No. of MPHWM In Position	No. of MPHWM Posts vacant
1	RIMS- SKLM	Calingapatnam	0	0	0
		Etcherla	4	4	0
		Gara	5	5	0
		Ponnada	4	4	0
		Singapuram	11	10	1
		Sreekurmam	5	4	1
		UFWC, SKLM	0	0	0
		Cluster Total	29	27	2

2	Rajam	Boddam	4	4	0
		Pogiri	4	2	2
		R.Amadalavalasa	9	9	0
		Vangara	6	6	0
		Cluster Total	23	21	2
3	Ponduru	G. Sigadam	6	6	0
		Kinthali	9	7	2
		S. Kavity	7	7	0
		Tadivalasa	0	0	0
		Cluster Total	22	20	2
4	Ranastalam	Laveru	2	2	0
		Murapaka	2	2	0
		Patharlapalli	7	6	1
		Cluster Total	11	10	1
5	Amadalavalasa	Akkulapeta	0	0	0
		Dusi	5	5	0
		Guttavalli	5	5	0
		L.N.Peta	4	4	0
		Sarubujjili	4	4	0
		Thogaram	3	3	0
		Cluster Total	21	21	0
6	Budithi	Atchutapuram	2	2	0
		Jalumuru	2	2	0
		Saravakota	9	7	2
		Cluster Total	13	11	2
7	Palakonda	Annavaram	7	7	0
		U.F.W.C. Palakonda	0	0	0
		Bitiwada	6	6	0
		Burja	0	0	0
		M. Sigupuram	4	4	0
		Veeraghattam	6	6	0
		Cluster Total	23	23	0
8	Seethampeta	Donubai	3	3	0
		Kusimi	3	3	0
		Cluster Total	6	6	0
9	Kotturu	Baleru	3	3	0
		Bathili	4	4	0
		Bhamini	4	4	0
		Kurigam	11	11	0
		Marripadu	3	3	0

		Cluster Total	25	25	0
10	Patapatnam	Baidalapuram	5	5	0
		Chapara	3	3	0
		Chorlangi	2	2	0
		Ganguwada	5	5	0
		Hiramandalam	4	4	0
		Meliaputti	5	5	0
		Cluster Total	24	24	0
11	Narasannapeta	Guppipeta	5	5	0
		Makivalasa	8	5	3
		Polaki	6	6	0
		Tilaru	5	5	0
		Urlam	0	0	0
		Cluster Total	24	21	3
12	Tekkali	D.G.Puram	3	3	0
		K. Kotturu	7	7	0
		UFWC, Tekkali	0	0	0
		Nandigam	4	4	0
		Naupada	2	2	0
		Cluster Total	16	16	0
13	Kotabommali	Borubhadra	2	2	0
		Kothapalli	5	5	0
		Santhabommali	1	1	0
		Cluster Total	8	8	0
14	Palasa	Akkupalli	4	4	0
		Karajada	2	2	0
		Govindapuram	4	4	0
		Rentikota	11	11	0
		Venkatapuram	0	0	0
		V. Kotturu	0	0	0
		Cluster Total	21	21	0
15	Haripuram	Budumbo Cly	2	2	0
		Mandasa	8	8	0
		Siripuram	2	2	0
		Cluster Total	12	12	0
16	Kavity	Borivanka	7	4	3
		Rajapuram			
		Manikyapuram			
		Belagam	3	3	0
		Cluster Total	10	7	3

17	Sompeta	Battigalluru	5	5	0
		Kanchili	5	5	0
		Korlam	3	3	0
		M.S.Palli	4	4	0
		Cluster Total	17	17	0
18	Ichapuram	Koligam	5	5	0
		Ichapuram	0	0	0
		UFWC-Ichapuram	0	0	0
		Cluster Total	5	5	0
	District Total		310	295	15

CHNC AND PHC WISE ASHAs POSITION IN SRIKAKULAM DISTRICT AS ON 04.05.2016

S.No	Name of CHNC	Name of PHC	No.of ASHAs Sanctioned	No.of ASHAs In - Position	No.of ASHA s Vacant
1	RIMS- SKLM	Calingapatnam	20	15	5
		Etcherla	50	50	0
		Gara	35	27	8
		Ponnada	45	41	4
		Singupuram	83	74	9
		Sreekurmam	40	34	6
		UFWC, SKLM	30	22	8
		Cluster Total	303	263	40
2	Rajam	Boddam	50	47	3
		Pogiri	45	37	8
		R.Amadalavalasa	80	75	5
		Vangara	60	47	13
		Cluster Total	235	206	29
3	Ponduru	G. Sigadam	66	67	-1
		Kinthali	45	40	5
		S. Kavity	85	80	5
		Tadivalasa	40	32	8
		Cluster Total	236	219	17
4	Ranastalam	Laveru	40	35	5
		Murapaka	45	36	9
		Patharlapalli	75	77	-2
		Cluster Total	160	148	12

5	Amadalavalasa	Akkulapeta	25	19	6
		Dusi	30	25	5
		Guttavalli	40	27	13
		L.N.Peta	45	43	2
		Sarubujili	46	44	2
		Thogaram	40	26	14
		Cluster Total	226	184	42
6	Budithi	Atchutapuram	40	33	7
		Jalumuru	45	38	7
		Saravakota	66	65	1
		Cluster Total	151	136	15
7	Palakonda	Annavaram	30	47	-17
		Bitiwada	40	34	6
		Burja	30	24	6
		M. Sigupuram	30	31	-1
		Veeraghattam	30	33	-3
		Cluster Total	160	169	-9
8	Seethampeta	Donubai	95	95	0
		Kusimi	85	78	7
		Cluster Total	180	173	7
9	Kotturu	Baleru	30	26	4
		Bathili	15	14	1
		Bhamini	20	15	5
		Kurigam	52	49	3
		Marripadu	111	111	0
		Cluster Total	228	215	13
10	Patapatnam	Baidalapuram	40	37	3
		Chapara	30	28	2
		Chorlangi	30	30	0
		Ganguwada	45	40	5
		Hiramandalam	60	53	7
		Meliaputti	40	41	-1
		Cluster Total	245	229	16
11	Narasannapeta	Guppidipeta	40	39	1
		Makivalasa	50	48	2
		Polaki	50	46	4
		Tilaru	45	42	3
		Urlam	35	33	2

		Cluster Total	220	208	12
12	Tekkali	D.G.Puram	20	14	6
		K. Kotturu	60	73	-13
		Nandigam	70	66	4
		Naupada	25	22	3
		Cluster Total	175	175	0
13	Kotabommali	Borubhadra	25	19	6
		Kothapalli	45	36	9
		Santhabommali	20	16	4
		Cluster Total	90	71	19
14	Palasa	Akkupalli	40	26	14
		Karajada	25	20	5
		Govindapuram	30	28	2
		Rentikota	40	38	2
		Venkatapuram	35	32	3
		V. Kotturu	30	27	3
		Cluster Total	200	171	29
15	Haripuram	Budumbo Cly	40	27	13
		Mandasa	75	25	50
		Siripuram	25	12	13
		Hiripuram CHC	59	54	5
		Cluster Total	199	118	81
16	Kavity	Borivanka	30	20	9
		Rajapuram	25	25	5
		Manikyapuram	25	16	5
		Belagam	40	30	15
		Cluster Total	120	91	34
17	Sompeta	Battigalluru/Baruva	35	21	20
		Kanchili	35	29	6
		Korlam	45	37	8
		M.S.Palli	40	32	8
		Cluster Total	155	119	42
18	Ichapuram	Koligam	13	26	-13
		Ichapuram	45	40	5
		Cluster Total	58	66	-8
		Grand Total	3341	2961	391

CHITTOOR

STATEMENT SHOWING THE CADRE STRENGTH PARTICULARS OF 1ST ANM & 2ND ANM AS ON 01.03.2016 IN CHITTOOR DISTRICT

Name of the District: Chittoor				ANM 1		ANM 2	
Sl.No.	Name of Cluster	Name of Mandal	Name of PHC	Sanctioned	In position	Sanctioned	In position
1	Kuppam	Santhipuram	Santhipuram	4	0	5	5
2			Rallabaduguru	4	1	5	5
3		Gudupalle	Gudupalle	7	4	9	8
4		Kuppam	Mallanur	4	2	6	4
5			Kangundi	3	2	5	5
6			Paipalam	6	4	8	5
7	V.Kota	Ramakuppam	Ramakuppam	3	0	4	3
8			Veernamala	3	0	3	2
9			Vijalapuram	2	1	3	3
10		V.Kota	V.Kota PHC unit	11	5	15	12
11		Baireddypalli	Baireddypalli	4	3	6	4
12			Theertham	3	0	4	3
13	Palamaner	Palamaner	Kolamasanapalle	7	6	8	7
14		Gangavaram	Gangavaram	4	2	5	3
15			Pathikonda	4	2	4	3
16		Peddapanjani	Peddapanjani	5	4	6	2
17			Rayalpeta	4	2	4	4
18	Punganur	Ramasamudram	Ramasamudram	4	1	6	5
19			Chembakur	3	2	5	3
20			Mudibapanapalli	14	10	17	14
21		Chowdepalle	Chowdepalle	7	7	8	7
22	Voyalpad	Nimmanapalle	Nimmanapalle	6	5	6	6
23		Vayalpad	Chinthaparthi	7	7	7	5
24		Gurramkonda	Gurramkonda	4	3	5	5
25			Tharigonda	3	2	3	3

26	Madanapalli	Madanapalli	C.T.M	6	6	7	6
27			Bommanacheruvu	3	3	5	4
28		B.Kothakota	B.Kothakota	9	8	10	9
29		Kurabalakota	Kurabalakota	7	5	8	8
30	Sadum	Somala	Kanduru	4	2	4	4
31			Peddaupparapalli	2	0	3	3
32			Somala	8	7	11	8
33		Pulicherla	Pulicherla	3	0	4	3
34			Kalluru	3	1	3	2
35			Yellankivaripalli	2	1	2	1
36		Rompicherla	Rompicherla	5	5	5	4
37		Sadum	-	0	0	0	0
38	Thamballapalli	Thamballapalli	Kosuvapalli	8	5	9	8
39		Peddamandyam	Peddamandyam	6	4	7	6
40		Molakalacheruvu	Molakalacheruvu	8	8	10	8
41		PTM	PTM	5	3	6	6
42			Kandukur	4	1	4	3
43	Piler	Piler	Regallu	5	5	6	4
44			Thalapula	4	4	5	5
45		K.V.Palli	Garnimitta	6	3	7	5
46	Kalikiri	Kalikiri	Mahal	4	4	4	4
47			Medikurthi	7	7	7	5
48		Kalakada	Kalakada	5	4	6	4
49			Errakotapalli	4	2	5	5
50	Chittoor	Chittoor	N.R.Pet	8	8	9	7
51		Gudipala	Gudipala	6	6	7	7
52			Bommasamudram	5	3	5	5
53		Gangadhara Nellore	Gangadhara Nellore	4	4	6	4
54			Thugundram	5	4	6	6
55		Palasamudram	Palasamudram	4	4	5	4
56	Puttur	Karvetinagaram	Karvetinagaram	10	7	10	10
57		Vedurukuppam	Pachikapalem	6	4	7	7
58		S.R.PURAM	S.R.PURAM	4	1	4	4
59			Arimakula Palli	5	4	5	5
60		Puttur	Gollapalli	7	7	7	3

61	P.Kothakota	Penumuru	Penumuru	7	7	10	9
62		Puthalapattu	Puthalapattu	6	6	6	5
63			Thalapulanenivaripalli	4	0	4	4
64		Irala	Irala	13	9	13	12
65	Bangarupalyam	Bangarupalyam	Thumbakuppam	12	7	14	12
66		Yadamari	Yadamari	5	4	5	5
67			Madireddypalli	4	4	5	5
68		Thavanampalli	Thavanampalli	9	7	11	10
69	Nagiri	Nindra	Nindra	21	15	27	25
70		Vijayapuram	Vijayapuram	5	0	6	4
71		Pichaturu	Pichaturu	7	4	8	7
72		Narayanavanam	Narayanavanam	10	10	11	9
73	Tirupathi	Vadamalapeta	Vadamalapeta	6	6	6	5
74		Tirupathi Rural	Mangalam	17	17	25	20
75		Tirupathi Urban	-	0	0	0	0
76		Renigunta	Renigunta	8	7	10	8
77		Yerpedu	Yerpedu	7	7	7	6
78			Papanaidupeta	5	5	5	4
79	Chinnagottigallu	C.G.Gallu	Bakarapet	5	5	5	4
80		Yerravaripalem	Yerravaripalem	2	1	3	3
81			Nerabailu	3	1	3	1
82			Yellamanda	3	2	3	2
83	Chandragiri	Chandragiri	Naravaripalli	7	7	9	7
84		Pakala	Pakala	7	6	7	6
85			Damalcheruvu	6	6	7	7
86		R.C.Puram	Kammapalle	4	4	4	4
87			Kuppambaduru	3	3	4	4
88	Srikalahasti	Thottambedu	Thottambedu	7	5	9	8
89		Srikalahsti	Empedu	9	7	9	9
90		B.N.Kandriga	B.N.Kandriga	6	5	7	6
91		K.V.B.Puram	K.V.B.Puram	5	2	6	6
92			Kovanur	3	3	4	3

93	Satyavedu	Varadaiahpalyam	Chinnapanduru	6	1	6	6
94		Sathyavedu	Dasukuppam	6	4	7	6
95		Varadaiahpalem	Varadaiahpalem	4	2	5	3
96		Nagalapuram	Nagalapuram	7	1	7	6
	TOTAL :-			547	395	644	544

STATEMENT SHOWING THE CADRE STRENGTH PARTICULARS OF MPHWM AS ON 01.03.2016 IN CHITTOOR DISTRICT

Name of the District: Chittoor				MPHW -M	
Sl.No.	Name of Cluster	Name of Mandal	Name of PHC	In position (Regular)	In position (Contract)
1	Kuppam	Santhipuram	Santhipuram	0	0
2			Rallabaduguru	0	2
3		Gudupalle	Gudupalle	1	1
4		Kuppam	Mallanur	0	1
5			Kangundi	0	3
6			Paipalam	0	0
7	V.Kota	Ramakuppam	Ramakuppam	0	2
8			Veernamala	0	1
9			Vijalapuram	0	1
10		V.Kota	V.Kota PHC unit	1	5
11		Baireddypalli	Baireddypalli	0	1
12			Theertham	1	1
13	Palamaner	Palamaner	Kolamasanapalle	0	3
14		Gangavaram	Gangavaram	2	0
15			Pathikonda	0	0
16		Peddapanjani	Peddapanjani	1	0
17			Rayalpeta	0	1

18	Punganur	Ramasamudram	Ramasamudram	1	1
19			Chembakur	0	1
20			Mudibapanapalli	1	1
21		Chowdepalle	Chowdepalle	0	0
22	Voyalpad	Nimmanapalle	Nimmanapalle	1	2
23		Vayalpad	Chinthaparthi	0	0
24		Gurramkonda	Gurramkonda	1	0
25			Tharigonda	0	0
26	Madanapalli	Madanapalli	C.T.M	0	2
27			Bommanacheruvu	0	0
28		B.Kothakota	B.Kothakota	0	2
29		Kurabalakota	Kurabalakota	1	1
30	Sadum	Somala	Kanduru	0	1
31			Peddaupparapalli	0	1
32			Somala	0	3
33		Pulicherla	Pulicherla	0	0
34			Kalluru	0	1
35			Yellankivaripalli	0	1
36		Rompicherla	Rompicherla	0	1
37		Sadum	-	0	0
38	Thamballapalli	Thamballapalli	Kosuvapalli	0	5
39		Peddmandyam	Peddmandyam	0	4
40		Molakalacheruvu	Molakalacheruvu	0	3
41		PTM	PTM	0	2
42			Kandukur	0	2
43	Piler	Piler	Regallu	1	0
44			Thalapula	0	2
45		K.V.Palli	Garnimitta	0	1
46	Kalikiri	Kalikiri	Mahal	0	1
47			Medikurthi	0	1
48		Kalakada	Kalakada	0	0
49			Errakotapalli	0	0

50	Chittoor	Chittoor	N.R.Pet	1	1
51		Gudipala	Gudipala	1	1
52			Bommasamudram	0	1
53		Gangadhara Nellore	Gangadhara Nellore	0	0
54			Thugundram	0	1
55		Palasamudram	Palasamudram	0	0
56	Puttur	Karvetinagaram	Karvetinagaram	1	2
57		Vedurukuppam	Pachikapalem	0	1
58		S.R.PURAM	S.R.PURAM	0	0
59			Arimakula Palli	1	0
60		Puttur	Gollapalli	2	1
61	P.Kothakota	Penumuru	Penumuru	2	0
62		Puthalapattu	Puthalapattu	0	2
63			Thalapulanenivaripalli	0	0
64		Irala	Irala	1	5
65	Bangarupalyam	Bangarupalyam	Thumbakuppam	1	0
66		Yadamari	Yadamari	1	1
67			Madireddypalli	2	1
68		Thavanampalli	Thavanampalli	0	3
69	Nagiri	Nindra	Nindra	0	3
70		Vijayapuram	Vijayapuram	0	1
71		Pichaturu	Pichaturu	1	2
72		Narayanavanam	Narayanavanam	0	2
73	Tirupathi	Vadamalapeta	Vadamalapeta	1	0
74		Tirupathi Rural	Mangalam	1	1
75		Tirupathi Urban	-	0	0
76		Renigunta	Renigunta	0	0
77		Yerpedu	Yerpedu	2	1
78			Papanaidupeta	0	0
79	Chinnagottigallu	C.G.Gallu	Bakarapet	0	1
80		Yerravaripalem	Yerravaripalem	0	0
81			Nerabailu	0	1
82			Yellamanda	0	1

83	Chandragiri	Chandragiri	Naravaripalli	0	1
84		Pakala	Pakala	0	0
85			Damalcheruvu	0	2
86		R.C.Puram	Kammapalle	1	0
87			Kuppambaduru	0	0
88	Srikalahasti	Thottambedu	Thottambedu	0	3
89		Srikalahsti	Empedu	0	1
90		B.N.Kandriga	B.N.Kandriga	1	0
91		K.V.B.Puram	K.V.B.Puram	0	1
92			Kovanur	0	0
93	Satyavedu	Varadaiahpalyam	Chinnapanduru	0	2
94		Sathyavedu	Dasukuppam	0	1
95		Varadaiahpalem	Varadaiahpalem	0	1
96		Nagalapuram	Nagalapuram	0	1
	TOTAL ::-			32	107

**STATEMENT SHOWING THE CADRE STRENGTH PARTICULARS OF ASHAs AS ON 01.03.2016
IN CHITTOOR DISTRICT**

Name of the District: Chittoor				ASHAs	
Sl.No.	Name of Cluster	Name of Mandal	Name of PHC	Sanctioned	In position
1	Kuppam	Santhipuram	Santhipuram	24	23
2			Rallabaduguru	20	19
3		Gudupalle	Gudupalle	26	25
4		Kuppam	Mallanur	25	24
5			Kangundi	17	19
6			Paipalam	28	35
7	V.Kota	Ramakuppam	Ramakuppam	24	21
8			Veernamala	4	3
9			Vijalapuram	17	16
10		V.Kota	V.Kota PHC unit	62	66
11		Baireddypalli	Baireddypalli	32	33
12			Theertham	22	23

13	Palamaner	Palamaner	Kolamasanapalle	29	51
14		Gangavaram	Gangavaram	34	27
15			Pathikonda	17	21
16		Peddapanjani	Peddapanjani	32	31
17			Rayalpeta	26	22
18	Punganur	Ramasamudram	Ramasamudram	25	31
19			Chembakur	19	21
20			Mudibapanapalli	52	87
21		Chowdepalle	Chowdepalle	43	42
22	Voyalpad	Nimmanapalle	Nimmanapalle	31	33
23		Voyalpad	Chinthaparthi	35	36
24		Gurramkonda	Gurramkonda	24	21
25			Tharigonda	15	15
26	Madanapalli	Madanapalli	C.T.M	46	46
27			Bommanacheruvu	29	32
28		B.Kothakota	B.Kothakota	45	45
29		Kurabalakota	Kurabalakota	41	31
30	Sadum	Somala	Kanduru	20	20
31			Peddaupparapalli	10	12
32			Somala	60	52
33		Pulicherla	Pulicherla	20	22
34			Kalluru	18	18
35			Yellankivaripalli	14	12
36		Rompicherla	Rompicherla	30	26
37		Sadum	-	0	0
38	Thamballapalli	Thamballapalli	Kosuvapalli	40	37
39		Peddamandyam	Peddamandyam	28	30
40		Molakalacheruvu	Molakalacheruvu	51	42
41		PTM	PTM	24	22
42			Kandukur	16	24
43	Piler	Piler	Regallu	24	33
44			Thalapula	28	30
45		K.V.Palli	Garnimitta	45	31

46	Kalikiri	Kalikiri	Mahal	15	15
47			Medikurthi	36	33
48		Kalakada	Kalakada	21	24
49			Errakotapalli	15	17
50	Chittoor	Chittoor	N.R.Pet	40	41
51		Gudipala	Gudipala	23	27
52			Bommasamudram	21	23
53		Gangadhara Nellore	Gangadhara Nellore	25	26
54			Thugundram	32	34
55		Palasamudram	Palasamudram	26	28
56		Karvetinagaram	Karvetinagaram	40	45
57	Puttur	Vedurukuppam	Pachikapalem	28	36
58		S.R.PURAM	S.R.PURAM	26	25
59			Arimakula Palli	27	28
60		Puttur	Gollapalli	14	32
61	P.Kothakota	Penumuru	Penumuru	52	51
62		Puthalapattu	Puthalapattu	21	26
63			Thalapulanenivaripalli	25	20
64		Irala	Irala	61	59
65	Bangarupalyam	Bangarupalyam	Thumbakuppam	100	83
66		Yadamari	Yadamari	30	28
67			Madireddypalli	26	21
68		Thavanampalli	Thavanampalli	70	60
69	Nagiri	Nindra	Nindra	67	75
70		Vijayapuram	Vijayapuram	39	39
71		Pichaturu	Pichaturu	41	39
72		Narayanavanam	Narayanavanam	52	48
73	Tirupathi	Vadamaipeta	Vadamalapeta	24	21
74		Tirupathi Rural	Mangalam	120	132
75		Tirupathi Urban	-	0	0
76		Renigunta	Renigunta	70	55
77		Yerpedu	Yerpedu	37	34
78			Papanaidupeta	28	25

79	Chinnagottigallu	C.G.Gallu	Bakarapet	37	23
80		Yerravaripalem	Yerravaripalem	10	11
81			Nerabailu	14	10
82			Yellamanda	10	13
83	Chandragiri	Chandragiri	Naravaripalli	59	56
84		Pakala	Pakala	36	34
85			Damalcheruvu	34	31
86		R.C.Puram	Kammapalle	38	21
87			Kuppambaduru	20	18
88	Srikalahasti	Thottambedu	Thottambedu	66	51
89		Srikalahsti	Empedu	45	54
90		B.N.Kandriga	B.N.Kandriga	47	33
91		K.V.B.Puram	K.V.B.Puram	24	24
92			Kovanur	18	18
93	Satyavedu	Varadaiahpalyam	Chinnapanduru	38	37
94		Sathyavedu	Dasukuppam	28	30
95		Varadaiahpalem	Varadaiahpalem	32	33
96		Nagalapuram	Nagalapuram	47	44
	TOTAL :-			3127	3101

KHAMMAM

STATEMENT SHOWING THE CADRE STRENGTH PARTICULARS OF ANMs AS ON 01.05.2016
IN KHAMMAM DISTRICT

Name of the District: Khammam		ANM 1			ANM 2		
Name of CHNC	Name of PHC	Sanctioned	In position	Vacant	Sanctioned	In position	Vacant
Khammam	Thallada	9	9	0	10	9	1
	Wyra	9	8	1	10	10	0
	Peddagopathi	5	5	0	5	4	1
	Thirumalayapalem	5	5	0	6	6	0
	MV Palaem	12	12	0	13	1	12
	Konijerla	5	5	0	6	5	1
	Sublaid	6	6	0	6	3	3
	Manchukonda	10	10	0	12	12	0
	Chintakani	9	9	0	10	10	0
Madhira	Matooripeta	10	9	1	10	9	1
	Banigandlapadu	9	8	1	9	0	9
	Bonakal	8	6	2	9	6	3
Nelakondapalli	Nelakondapalli	12	12	0	12	12	0
	Mudigonda	10	10	0	11	10	1
	Kusumanchi	11	10	1	12	11	0
Sathupalli	Gangaram	11	11	0	12	12	0
	Vemsoor	9	7	2	9	9	0
	Dhammampeta	8	8	0	8	1	7
	Patwarigudem	7	6	1	7	3	4
Penuballi	Kalluru	12	11	1	12	12	0
	Lankasagar	11	10	1	11	10	1
	Erragunta	7	6	1	7	5	2
	Chandurugonda	8	4	4	8	7	1
Aswaraopeta	Aswaraopeta	11	10	1	12	9	3
	Gummadivalli	4	4	0	4	4	0

Julurupadu	Enkoor	10	8	2	11	10	1
	Julurpadu	9	8	1	9	8	1
	Sujathanagar	11	11	0	12	9	3
	Penagadapa	10	10	0	11	6	5
Yellandu	Gundala	4	3	1	4	3	1
	Sulhanagar	11	11	0	12	12	0
	Singareni	15	15	0	16	10	6
	Kamepalli	12	12	0	13	4	9
	Rompedu	11	11	0	11	6	5
	Komararam	7	6	1	7	6	1
Manguru	Manuguru	18	18	0	20	18	2
	Manuguru (clinical)	1	1	0	0	0	0
	Karakagudem	4	4	0	4	4	0
	Pinapaka	5	4	1	6	6	0
	Janampeta	4	3	1	4	3	1
	Aswapuram	11	11	0	12	9	3
Palvoncha	Jaganadhapuram	8	7	1	8	8	0
	Ulvanoor	5	5	0	5	5	0
	Mangapeta	8	8	0	8	7	1
	Allapalli	9	8	1	10	9	1
	Regalla	8	8	0	10	9	1
Garla	Mulakanoor	11	11	0	11	8	3
	Bayyaram	7	7	0	8	7	1
	Gandhampalli	7	5	1	7	7	0
Cherla	Cherla	5	5	0	6	6	0
	Satyanarayanapuram	6	5	1	6	6	0
	Dummugudem	0	0	0	0	0	0
	Parnasala	5	4	1	4	4	0

Bhadrachalam	Narsapuram	7	7	0	7	3	4
	Edira	8	7	1	10	8	2
Venkatapuram	Peruru	4	3	1	4	4	0
	Wazeedu	4	2	2	5	0	0
Burgampadu	MP Banjara	11	11	0	13	3	3
	UFWC Yellandu	1	1	0	0	0	0
	UFWC Kothagudem	2	2	0	0	0	0
	UFWC Palvancha	1	0	1	0	0	0
	PP Unit Khammam	2	2	0	0	0	0
	PP Unit Madhira	1	1	0	0	0	0
	MNP Madhra	1	1	0	0	0	0
	Addl. TB	1	1	0	0	0	0
	TOTAL	483	448	36	505	400	105

STATEMENT SHOWING THE CADRE STRENGTH PARTICULARS OF MPHWM AS ON 1.05.2016 IN KHAMMAM DISTRICT

	Sanctioned	In position		Vacant
		Regular	Contractual	
Khammam	277	14	132	131
Telangana State	2570	84	1161	1325

STATEMENT SHOWING THE CADRE STRENGTH PARTICULARS OF ASHAs AS ON 01.05.2016 IN KHAMMAM DISTRICT

27,730 Sanctioned positions for ASHAs at the state level (Telangana)

In Khammam, there are 3195 sanctioned ASHA positions out of which 3182 are filled and 12 are vacant positions. Post state bifurcation, 540 ASHAs have gone to AP including seven Mandals.

PROCEEDINGS OF PANEL DISCUSSION

On first day of the consultation 'Functioning of Frontline Service providers for improved health and nutrition outcomes' a panel discussion was organised on the theme of 'Way to Healthier India: Role of Frontline Health Workers'. During the discussion three panelists i.e. Dr. Sanjeev Kumar (NHSRC), Dr. Dinesh Aggarwal (IPE Global, New Delhi) and Dr. Rajesh Kumar (PGI, Chandigarh) presented their views related with different aspects of functioning of frontline health workers. Session was moderated by Dr. Ajay Khera (MoHFW, New Delhi). A detailed note of the same is presented in the following sections based on verbatims available for session recordings.

Session 1: Universal Health Coverage and Sustainable Development Goals: Need to gear up frontline health workers by Dr. Sanjeev Kumar

It is important to gauge that in the paradigm of current health situation where we are positioned. Addressing current roles of FLHWs in view of these changes is crucial.

Addressing killer conditions

What kills Indians today? 1 crore Indians die and number one killer is cardio-vascular diseases which kills 25 lacs (25%) of the population including hypertension, stroke etc. Cancer kills about 7 lacs of people every year, Diabetes around 2 lacs people and chronic obstructive diseases of lung kill about 12 lac, other NCDs contribute to around 11 lacs, accidents and injuries another 11 lacs. These conditions are growing by the year. Two years back number and proportion would be lesser. What is being squeezed into smaller number is diseases due to communicable diseases, maternal, peri-natal, nutrition conditions which together account for 27 lacs deaths. There is an unfinished agenda.

What is wrong in the current primary health care system?

What I am not doing because of over work in health system, so busy jumping and pulling people to the shore that I have no time to look who is in the upstream and putting all the pull and push? If I stop that workload automatically will be much lesser. Currently in PHC there is a very little focus on prevention and promotion of health care.

Recently program has been started by GoI for cancer care. At primary health care what do we do? We do screening. ASHA, ANM will be all involved in screening. We will detect those with symptoms and treat but in the process lifestyle conditions causing those diseases are overlooked. We need 'whole population approach to health'. Population can be divided into following groups.

- Population which is healthy with no risk factors and diseases like school children. There is need to promote healthy lifestyles for them so that they do not get the disease in future. Presently we are doing very little on that front.
- Population with risk factors and more likely to have a disease condition. We need to be more active in promoting healthy lifestyle and also identify risk factors. This will require closer screening at population level.

- Population with disease: Neither population is aware nor the system. This is what we do with the screening. 'Detect them early and put them on treatment'. Making sure that they continue with healthy lifestyle. Complications minimize with due care. It is essential to ensure compliance through FLHWs. So if these diseases are not prevented now than FLHWs will land in a situation where they are more and more loaded. Need to move beyond MCH and look at NCDs.

SDGs present a very good opportunity to address factors which lead to diseases. Four of the SDG goals are related with determinants of diseases. Inequity majorly comes from factors outside health system and five of SDGs goals are related with it. Safe and clean environment is also important.

Goals of health are to ensure healthy life and promote wellbeing for all at all ages. There is a need for a shift which keeps in view healthy life from pregnancy to death. Govt has approved a comprehensive primary health care under which all SCs will become health and wellness centre with a practicing practitioner in it. It could be a nurse practitioner as approved by Indian Nursing Council or AYUSH doctor too can be practitioner with a bridge training course. Govt is due to roll out six months training program for the same. These practitioners with due training can become managers in health and wellness centres.

How to address shift taking place in current disease spectrum?

Most important is the role of the families and individuals. We normally stop at the frontline of AWWs and ASHAs. Frontline of dealing with disease and well-being is not ANM-ASHA-AWW. It is in each one of you out there. Recently, Lancet commission on women and health costed how much care is being provided by women. 175,000 crore Rs per year is the care cost. Rs. 230,000 crore per year is the cost of family contribution in providing healthcare. They are our resource which is often ignored. We need to mobilize them. Family contributes majorly in managing hypertension or other ailments. Likewise, similar example for communicable diseases. Bottom of the pyramid starts with care provided at the family level. Primary care level work with FLHWs is preceded by what one can do at home and what one's social support system provides. This is followed by secondary, tertiary health care and role of other sectors.

Out of the 30 fastest growing professions in US, 25 are related to health. Many of these cadres don't exist in India. Medical Council of India looks at only MBBS or post-graduates. Community medicine is often not much looked after. In US and UK, physical assistants exist. However, in India there are not enough health care providers at SC and PHC level. In most African countries, there are clinical officers who have 2-3 years of study after school. At present there is no council looking into human resource in a comprehensive manner. We need a comprehensive human resource or national commission on human resource which can look into human resources for health in a comprehensive manner. Once graduate one needs to continue so that there has to be a system of continuing education with provision for accreditation and reaccreditation. There is another complication which has been set in because of private sector. Impression in the minds of young doctors is that if I paid lacs of rupees then how can I go for a job in rural area PHC just for Rs 40,000/- only? They probably prefer to be posted as specialist for return on investments.

Having human resource is just not enough. They need regular supplies of medicines, skills to be upgraded in line with the new programs. Looking at those who are present - Are they able to do what they are expected to rather than merely looking at vacancies? Are they in line with epidemiological pattern of the disease which has emerged today?

Creation of new cadres

Public health cadre is one area. Almost all the Public Health programs except in few states are handled by clinicians. They were seeing patients till yesterday and become program managers today. They do not have Public Health managerial skills.

Mid-level health care providers

These providers need to be promoted. Government is now moving towards nurse practitioners and health managers in wellness centre with due bridged training.

Augmenting skills

Certifying minimum skills is a must. There needs to be one common exam certifying all doctors who have finished MBBS other wise it brings in so much of variation in quality of Doctor. When recruited generally knowledge is looked at and not skills. Focus needs to be shifted in recruitment. NHSRC guideline for MPHW-M and ANM recruitment needs to be looked at.

Problem-solving supervision

It is required that one listens to the FLHWs and solve their problems. There should be no fault-finding instead supervision should be geared towards problem-solving. One-two year experienced graduate shouting at ANM with 25 years of experience is certainly not acceptable. His job is to find out what is ANMs problem and how problem can be solved.

Team building

How are they working as a team at the grassroots level. What role AWW-ASHA-ANM is playing and how does it complement each other. Joint training is one initiative for example as it is done in Rajasthan. How VHSNC platform is working? Improved interaction between the community and health functionaries is a must. Decentralized planning need to be emphasized. If FLHWs are unable to plan and carry out the work than it's going to play out differently.

Where does technology come in?

If ANM is spending 16-17% of her time in recording than thinking about is ANMOL a good tool so that they don't have to come to SC and re-enter all that work they have done. Can she talk to beneficiary or her supervisor through teleconferencing or Skype use. Can supervisor use technology so that she can perform her job better? One needs to be careful while using the technology.

Shortage of doctors

Medicines dispensing machine through healthcare ATM can be one of the options. ANM connects patient to the doctor sitting miles away. After listening to the patient machine is connected with through SMS and medicines are delivered. ANM only explains what is to be done and how. This can actually help in combating with shortage of health service providers at the ground level. There are other initiatives too which are technologically enables and for community level health service delivery like Teleophthalmology in Agartala Medical College, Teleradiology, Telemedicine etc. Scaling up of technological innovations is the need of the hour.

Tap into new political initiatives like Digital India, skill development with National Skill Development Corporation is required in the present times.

Thus, there are three key messages:

- SDGs offer an excellent opportunity to address population health in a comprehensive manner.
- Shortage and skill gap in existing cadre can be addressed using appropriate technology.
- Creating new cadre of health functionaries at the frontline.

Session 2: Need to revisit the expectations from, and job responsibilities of Grassroots service providers

SDGs are an important call for FLHWs in terms of primary health care service delivery. Larger goal of equity will be achieved only when we invest in these cadres. Globally, especially in Africa, big movement of health workers has been initiated. There has to be a discussion around what needs to be done. Disease spectrum is changing fast and life expectancy/longevity is increasing. New roles have to be set in for the FLHWs keeping in view of all of this.

Health systemic review in health policy and planning (2015) articulates about what factors improve the performance of FLHWs or Community health workers. Ecosystem related with these factors is highly significant in terms of defining their motivation, their attitudes, their working structure etc. Systemic issues of recruitment, supervision need to be addressed.

There is need to expand their roles to curative services. We need to envisage FLHWs providing credible primary health care at the grassroots. There needs a rethinking round the possibility of expanding these cadres to basic clinical functions. This will in turn help in dealing with scarcity of doctors.

Flexibility in the working of FLHWs is very much crucial. In terms of work hours, visit schedules, activity plan- they should be allowed for a flexibility to be able to address additional needs of the community in an organised manner.

In the coming years, burden of disease because of NCDs is going to be very high for which we need to prepare all the workers. Preventive advices, life style and behavior modifications need to be induced through FLHWs. There is a need to reflect about can we mobilize the community through FLHWs provided they have skill sets, knowledge, time and incentives for NCD interventions.

There is a much greater need for state level planning with redefined package for burden of diseases which is state specific. As one size does not fit all like wise one single guideline or strategy will not be sufficient for different kinds of contexts and settings that exist. There is an unfinished agenda related with disease burden across the states. FLHWs are a sub-system in itself. It needs to be adequately funded. But we don't have any provision to say where the funding for this sub-system comes from in terms of recruitment, capacity building, supervision. In present health budgeting there is no specific structure for primary health care. Number of FLHWs is huge which needs to have complete system with all resources and support in place.

In the current times there is dire need for state level planning with support from the community and decentralized planning. At the level of health system constant support and mentoring is required for FLHWs.

Session 3: Supervision and monitoring of frontline health workers

Supervision is the weakest link in the whole system. Hardly, anyone supervises FLHWs and those who are at the national, state, district and sub-district level are busy in other aspects in spite of the fact that supervision is one of their key responsibilities. We need to reverse this pattern and facilitate FLHWs better with supportive supervision. Those who are at the frontline (ASHAs, ANMs, MPHW-M) can function only when they are supported but in the system hardly any support is available to them along with a lot of demands from them.

Why is it so important to support FLHWs?

History tells that primary health care is one of the most important discovery of the last century which went unrecognized. In the history of mankind we have seen great demographic and epidemiological transition. First transition occurred because of socio-economic conditions and nutrition improvement. McKeown showed before the discovery of anti-TB therapy- TB declined in England and Wales because of improved socio-economic, living and nutrition conditions. Thus, a belief was strengthened that with socio-economic development diseases will be prevented in future however this takes a long time.

Primary health care effect: implemented at a mass scale throughout the developing world. In last 60 years there has been a rapid decline in mortality in countries despite they being so poor.

Primary health care implementation by FLHWs: Earlier communicable diseases and now chronic NCDs have changed the disease spectrum entirely. FLHWs need to win this war. For this they need to be supported further. They already have support from the community in various functions, as present study also shares. However, receiving adequate support from the health system is crucial. In last ten years, NRHM had brought in a paradigm shift. It introduced 2nd ANMs. There is a need for the two ANMs and other cadres to work as a team in the field. ANM complements functions of ASHAs and AWWs. Functions of FLHWs are closely linked and dependent upon each other. Whole team functioning is important wherein doctors too need to team up.

In changing times, continuity of care is more important which can only be provided by FLHWs. For doctors at CHC and PHC it is not possible to know everybody from the community. FLHWs know people closely from the community and can be instrumental in bringing continuity of care. Adherence to treatments can be facilitated well by FLHWs. There has to be a family approach to care and FLHWs need to be prepared for the same. We need a support system which can build these capacities in FLHWs and provide material support to them.

Who should supervise?

Supervision by supervisor of the same gender is essential. There has to be a well trained and qualified cadre separately for supervision. It is better to have a supervisor from among FLHWs only. ANMs who become LHVs can be one such. They continue to be with same designation and same salary which needs to be changed. Supervisors should be practitioners and not just alone supervisors sitting in the facility. This is also important because as shown in the study FLHWs relied on them. Supervisors must practice with FLHWs at field and facility level. Means of communication like cellphones can be used to remain connected. Approachability of the supervisor is very much crucial.

When supervision should take place?

There has to be a balance of supervision frequency with meetings. Supervisory visits can be monthly for remote area FLHWs. On site weekly supervision should be conducted. If supervision is on a monthly basis then meetings should be held quarterly. Care should be taken that not too much of time is spent on meetings.

How supervision should be done?

Individual or group supervision depends upon the number of supervisors available. Ideally it should be both ways. Individual supervision can be on-site or at the facility while group supervision can be in the form of a meeting where best practices are shared.

Where supervision should take place?

It should be in the clinic/facility and in the field.

What should be done during supervision?

There should be a rational combination of supervision of clinical care, managerial and technical aspects along with capacity building and problem solving. Observations should be made about how things happen, how services are delivered and no electronic device can tell about this. At PHC, high quality of service delivery has to be there. Each state and the district has to build a supervision system in its own context. But, it has to be funded well. Funding for supervision should be there. Supervisors have to travel as well. Most states have a fixed travel allowance which is very less. It should be increased with submission of TA bills.

How supervision should be planned in recording?

Planned supervision by pre-announcing the dates is advisable. At times it is better to tell FLHWs about the visit and not to catch them surprisingly. There has to be a supervisory plan in synchrony with FLHWs plan. Structured supervision should be conducted using a checklist and not just attendance register.

Monitoring of FLHWs

Qualitative aspect of the study showed that FLHWs have a huge number of registers to be maintained along with considerable amount of time being spent in maintaining the same. However, through qualitative aspect of the study (Venn diagram) ANMs did not perceive it to be a time consuming task. At the central level, our emphasis has always been more on outputs and coverage. Instead there should be a strong emphasis on inputs with responsibilities of officials at the state, district and sub-district level. There is no difference in job charts of 1st ANM and 2nd ANM. However, contractual 2nd ANM gets half the salary amount of what 1st ANM receives. So motivation certainly goes down.

All kinds of supplies need to be sourced by the supervisors to FLHWs. Monitoring of the process with due support from the system is vital for the quality of services and functioning of FLHWs. There should be a mixed usage of electronic system of monitoring and face to face interactions by the supervisors.

Importantly, FLHWs should monitor themselves. Records and registers should be of use to them because they have to provide continuity of care and services to the community. FLHWs should be able to see value in the services delivered by them. FLHWs have designed their own

system of functioning irrespective of what is prescribed. For example they maintain their own set of records for their ready reference regarding the services. Flexibility should be permitted to them. There is need to strengthen family approach to care with facilitative role of FLHWs.

Lastly, to improve everything our human resources for health needs three times of nuts in terms of budget, improved governance, simplified procedures, recruitment, supplies etc. In future, this type of support and studies will improve the system. Supervision and monitoring is a key to see what we had planned is achieved or not. Primary health care is indispensable. With changing time and the context we might need to readapt or redesign or strengthen primary health care approach.

Discussions

Following to presentations by the panelists there was a discussion held where in key points of discussions were as follows:

- In view of NCDs and SDGs it is important to see how MPH-W-M is positioned.
- There is often a complaint that MPH-W-M cadre cannot be managed. It is dying cadre with no recruitments by the state governments except for the states like Tamilnadu and Orissa. In next 10-15 years those who presently exist will also retire and eventually cadre will totally die out. There is a need to supervise MPH-W-M wherever they are present. However, same gender supervisor should supervise same gender FLHW. More than outside instances of exploitation of ANMs are instances from within the system. What a female worker can do a male worker too can perform except for abdominal check up of women. They should not be differentiated in terms of job functions rather it should be uniformly divided between the two.
- In monitoring of UHC, based on WHO-World Bank report, first few indicators are outside health. Importance of water and sanitation has long been there in health of the people. Delivery of preventive, promotive care by FLHWs need to be strengthened. Rest of the system has to support it UHC is one of nine targets under health goals. There is a need to understand what UHC is and role of FLHWs within the same.
- There is need to establish new cadres with public health management orientation and with enhanced roles. There is need to relook at the limitation of cadres with certain clinical and non-clinical functions.
- Rethinking is needed around the aspect that do we want regular workers under 7th pay commissions or contractual workers or community volunteers. Are we creating cadres for example ASHAs which are eventually turning into a contractual worker with performance based incentives and in certain places fixed salaries. Concept of community activism and voluntarism is getting lost over time. Is this phenomenon also because that we don't know how to get performance out of a regular worker? And hence the problem of performance based incentives arises. ASHA is often penalized. Is it a strategy of convenience or we are actually looking for performance. If we keep paying ASHAs, with no clarity around her modality of work and voluntarism, then manipulations with the system can always be there.
- Accountable governance can solve major issues related with FLHWs. What is doable under a given circumstance? There are guidelines about ANMs which need to be streamlined and implemented. There is need to strongly revitalise supervision component.
- Focus on the system then on an individual alone. Need to see the performance when brought to another centre. There has to be strong thinking around what is the supportive

system and micro system available to FLHWs for functioning. Community based initiatives need to be strengthened. Question is not about what kind of worker per se but what kind of system he/she gets.

- In Tamilnadu, when vacancies come then contractual staff moves to regular positions and thus large number of contractual workers do not get accumulated in the system. This also helps in the long way in preventing the dissatisfaction.
- There is a need for an excellent frontline care for primary health care with expanded roles of FLHWs based on the needs, clarity around contractual and regular workers, strengthened supportive and monitoring system, augmenting skills of the workers, softer aspects like work motivation and attitudes.

When National Health Mission started, Govt was providing 80% funding. Now it has moved to a system where 60:40 ratio exists for funding. There is a pressure on states to convert contractual positions to regular positions. There is a need to relook at the primary health care system holistically. It is a high time now to make a real dent into health and nutrition outcomes of the populations. Expanding the scope and continual development of a system to keep FLHWs moving is the need of the hour.

- i. WHO(2013), A Universal Truth: No Health Without a Workforce, Third Global Forum on Human Resources for Health Report; www.who.int/workforcealliance/knowledge/resources/hrhreport2013/en
- ii. WHO, Global strategy on human resources for health: Workforce 2030 http://www.who.int/hrh/resources/glob-strat-hrh_workforce2030.pdf
- iii. Hazarika I. 2013, Health workforce in India: assessment of availability, production and distribution, WHO South-East Asia Journal of Public Health, 2013 April–June 2(2). Retrieved from: http://www.searo.who.int/publications/journals/seajph/seajphv2n2_p106.pdf
- iv. Nandan D. and Agarwal D, 2012, Human Resources for Health in India: Urgent Need for Reforms, Indian Journal of Community Medicine. 2012 Oct-Dec; 37(4): 205–206. doi: 10.4103/0970-0218.103464 PMID: PMC3531009. Retrieved from: <http://www.ijcm.org.in/downloadpdf.asp?issn=0970-0218;year=2012;volume=37;issue=4;spage=205;epage=206;aulast=Nandan;type=2>
- v. Rao M., Rao Krishna D., Shiva Kumar A. K., Chatterjee M., Sundararaman T., 2011, India: Towards Universal Health Coverage, Human resources for Health in India, Lancet 2011; 377: 587–98 Published Online January 12, 2011 DOI:10.1016/S01406736(10)61888-0. Retrieved from: <http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736%2810%2961888-0.pdf> Vol 377 February 12, 2011
- vi. Rao Krishna, D., Bhatnagar A. and Berman P., 2009, India's Health Workforce: Size, Composition and distribution, PHFI – INDIA HEART BEAT, Volume-1, Number:3. Retrieved from: <https://www.phfi.org/publications/journals>
- vii. Rao Krishna, D., Bhatnagar A. and Berman P., 2012, So many, yet few: Human resources for health in India, Human Resources for Health 2012, 10:19 doi:10.1186/1478-4491-10-19 Retrieved from: <http://www.who.int/workforcealliance/knowledge/resources/hrhindiaarticle/en/>
- viii. Nandan D., Nair K. S. and Datta U., 2007, Human Resources for Public Health in India – Issues and Challenges, Health and Population Perspectives and Issues 30(4):230-242,2007 Retrieved from: <http://medind.nic.in/hab/t07/i4/habt07i4p230.pdf>
- ix. Garg S., Singh R., Grover M, (2012): India's health workforce: Current status and the way forward - The National Medical Journal of India (data from Rural Health Bulletin, Ministry of Health & Family Welfare, GoI - 2011
- x. Rural Health Statistics of India- 2012, Statistics Division, Ministry of Health and Family Welfare, Government of India. Pg.no 16 www.mohfw.nic.in/WriteReadData/1892s/492794502RHS%202012.pdf
- xi. Rural Health Statistics of India 2012, Statistics Division Ministry of Health and Family Welfare Government of India, Pg. no.:49,55,58.
- xii. Rural Health Statistics of India- 2012, Pg.no. 55 & 57 http://nrhm.gov.in/nrhm-in-state/state-wise-information/andhra-pradesh.html#health_profile
- xiii. Hazarika I. (2013), Health workforce in India: assessment of availability, production and distribution, WHO South-East Asia Journal of Public Health 2013 | April–June 2(2). Pg.no.106 http://www.searo.who.int/publications/journals/seajph/seajphv2n2_p106.pdf
- xiv. Harper S., Mousa, F. T., 2013, Time and Motion Studies, Oxford University Press, ISBN 9780199846740

- xv. https://books.google.co.in/books?id=aQ5VHgHPa9UC&pg=PA192&lpg=PA192&dq=time+and+motion+studies+by+frank+and+lillian+gilbreth&source=bl&ots=-CF0nAgAF1&sig=KtGapLjYCIyXC8I7dCmP_yk-nxU&hl=en&sa=X&ei=k8MPVcuNDs_kuQSd0IDoCA&ved=0CCsQ6AEwAzgU#v=onepage&q=time%20and%20motion%20studies%20by%20frank%20and%20lillian%20gilbreth&f=false (Pg.no 192)
- xvi. Price B., 1989, Frank and Lillian Gilbreth and the Manufacture and Marketing of Motion Study, 1908-1924, Business and Economic History, Second Series, Volume Eighteen, ISSN 0849-6825, Pg.No2
- xvii. <https://books.google.co.in/books?id=53MIBBB8ECsC&pg=PA217&lpg=PA217&dq=Time+and+Motion+studies+s=oDySHcN59G&sig=L4q0DXQwpmSVgXzdgqRrQrMVy4o&hl=en&sa=X&ei=zk4nVcHMHC2PuASb2IDIDA&ved=0CEAQ6AEwCDgK#v=onepage&q=Time%20and%20Motion%20studies%20in%20increasing%20production%20in%20department%20stores&f=false> Pg.no. 217
- xviii. Srinivasan K., Sarma P. S., 2012, Study on Workload of Public Health Nurses and other Women Health Workers – Achutha Menon Centre of Health Science Studies, Sree Chitra Tirunal Institute of Medical Sciences and Technology, Trivandrum, Kerala <http://www.sctimst.ac.in/About%20SCTIMST/Organisation/AMCHSS/Projects/List%20of%20Ongoing%20Projects/resources/Workload%20of%20public%20health%20nurses%20and%20other%20women%20health%20workers.pdf>
- xix. Madhavi L. H., Singh H. K. G., 2009, A Study on Knowledge of Anganwadi Workers and Their Problems in Rural Field Practice Area of Hebbal, Gulbarga District. Dept of Community Medicine, KBNIMS, Gulbarga. Journal of Medical Education & Research. Pg. no. 62 http://www.journal.mimsr.edu.in/download/02_Dec-2011/2.13_A-Study-on-Knowledge-of-Anganwadi-Workers.pdf
- xx. Evaluation Report on Integrated Child Development Services, March-2011. Programme Evaluation Organization, Planning Commission of India, New Delhi. Pg. no. 70. http://planningcommission.nic.in/reports/peoreport/peo/peo_icds.pdf
- xxi. Chauhan P. S., Rehman M. M., Tomar S., 2009, The Study of Schedule of Rates for National Rural Employment Guarantee Scheme, Draft report, V.V. Giri National Labour Institute Noida, Sponsored by Department of Rural Development, Ministry of Rural Development, Government of India, Pg.No.10
- xxii. Planning and Implementation of National Rural Employment Guarantee Scheme in Bihar – A process study (2006-07), National Institute of Rural Development, Hyderabad and N.N. Sinha Institute of Social Studies, Patna, . Pg.no 38
- xxiii. Patton Jr. M. W., 2011, Developing a time and motion study for a lean health care environment, Michael Winston Patton Jr University of Kentucky.
- xxiv. Kranzer K., Lawn D. S., Meyer G. R., Vassall A., Raditlhalo E., Govindasamy D., Schaik N. V. , Wood R., Bekker L. G. (2012), Pg. 9 Feasibility, Yield, and Cost of Active Tuberculosis Case Finding Linked to a Mobile HIV Service in Cape Town, South Africa: A Cross-sectional Study. Population-Based Active Tuberculosis Case Finding - August 2012 | Volume 9 | Issue 8 | e1001281
- xxv. Janowitz B., Johnson L., Thompson A., West C., Marangwanda C., and Maggwa N. B. (2002), Excess Capacity and the Cost of Adding Services At Family Planning Clinics in Zimbabwe. Article in - International Family Planning Perspectives - Volume 28, Number 2, June 2002. Pg. (no. 58)

- xxvi. Mathewos B., Russell J. and Bekele A., 2014, How do health extension workers in Ethiopia allocate their time? Lindsay Mangham-Jefferies, Human Resources for Health
- xxvii. Manzi. F., Schellenberg J. A., Hutton G., Wyss K., Mbuya C., Shirima K., Mshinda H., Tanner M. and Schellenberg D., 2012, Human resources for health care delivery in Tanzania: a multifaceted problem, Human Resources for Health
- xxviii. Hendrich A., Chow M., Skierczynski B. A. and Lu Z. 2008, A 36-Hospital Time and Motion Study: How Do Medical-Surgical Nurses Spend Their Time?, The Permanente Journal/ summer 2008/Vol. 12 No.3. http://www.issue1ab.org/resource/36hospital_time_and_motion_study_how_do_medicalsurgical_nurses_spend_their_time
- xxix. Srinivasan K., Sarma P. S., 2012, Study on Workload of Public Health Nurses and other Women Health Workers – AchuthaMenon Centre of Health Science Studies, Sree ChitraTirunal Institute of Medical Sciences and Technology, Trivandrum, Kerala, India <http://www.sctimst.ac.in/About%20SCTIMST/Organisation/AMCHSS/Projects/List%20of%20Ongoing%20Projects/resources/Workload%20of%20public%20health%20nurses%20and%20other%20women%20health%20workers.pdf>
- xxx. Manna N., Samsuzzaman Md., and Das S., 2014, A time motion study in the OPD clinic of a rural hospital of West Bengal. Department of Community Medicine, Medical College, Kolkata.<http://www.iosrjournals.org/iosr-jdms/papers/Vol13-issue7/Version-2/H013723437.pdf>
- xxxi. Sharma B., Roy S., Mavalankar D., Ranjan P., andTrivedi P., 2010, The Role of the District Public Health Nurses: A Study from Gujarat, Indian Institute of Management, Ahmedabad. <http://www.iimahd.ernet.in/publications/data/2010-02-04Sharma.pdf>
- xxxii. Ramakrishna R., Subrahmanyam K.V.R. and Sudhakar Babu M., 2014: Report on quality monitoring of important components of programme implementation plan (PIP) 2013-14, Srikakulam District of AP, Study No. 132, Population research centre, Andhra University, Visakhapatnam
- xxxiii. Based on data received from DM & HO office, Srikakulam
- xxxiv. Rural Health Statistics (2014-15), Government of India, Ministry of Health and Family Welfare, Statistics Division http://wcd.nic.in/sites/default/files/RHS_1.pdf Accessed on 27 February 2016
- xxxv. Syamala.T.S.& Subiya L. (2014): NRHM-PIP Monitoring for Chittoor District, Andhra Pradesh, Population Research Centre, Institute for Social and Economic Change, Bangalore
- xxxvi. Based on data received from DM & HO office, Chittoor
- xxxvii. Ramakrishna R., Subrahmanyam K.V.R, and Sudhakar Bbu M., 2013: Report on quality monitoring of important components of programme implementation plan (PIP) 2013-14, Khammam District, Study No. 130, Population research centre, Andhra University, Visakhapatnam
- xxxviii. District level household and facility survey data (DLHS) 4, District Fact Sheets (2012-13) for Srikakulam, Chittoor and Khammam, IIPS, Mumbai
- xxxix. Schrauf R., Sanchez J., 2004: *The preponderance of negative emotion words in the emotion lexicon: A cross generational and cross-linguistic study.* Journal of Multilingual and Multicultural Development; 25(2-3):266-84.

- xl. Adams T. L., 2010, Gender and Feminization in Health Care Professions. *Sociology Compass*, 4: 454–465. doi: 10.1111/j.1751-9020.2010.00294.x
- xli. Hernández A.R. et.al. 2014: *More than a checklist: a realist evaluation of supervision of mid-level health workers in rural Guatemala*. *BMC Health Services Research* 14:112 DOI: 10.1186/1472-6963-14-112
- xlii. HillZ. et.al. 2014: *Supervising community health workers in low-income countries - a review of impact and implementation issues*. *Glob Health Action* 2014, 7: 24085 - <http://dx.doi.org/10.3402/gha.v7.24085>
- xliii. Kok M., Muula A., 2013: *Motivation and job satisfaction of health surveillance assistants in Mwanza, Malawi: an explorative study*. *Malawi Med J*; 25: 511.
- xliv. USAID (2006). *Management science for health, supportive supervision to improve integrated primary health care*. Occasional. Paper No. 2. Washington, DC: USAID.
- xlvi. Roemer M.I., Montoya-Aguilar C., *Quality assessment and assurance in primary health care*. Offset publication No. 105. Geneva: World Health Organization; 1988.
- xlvi. Shamasunder C., Sriram T. G., Murali Raj, S. G., & Shanmugham V., 1986, VALIDITY OF A SHORT 5-ITEM VERSION OF THE GENERAL HEALTH QUESTIONNAIRE (G.H.Q). *Indian Journal of Psychiatry*, 28(3), 217–219.
- xlvi. **Janani Suraksha Yojana (JSY)** is a safe motherhood intervention under the National Rural Health Mission (NRHM). It is being implemented with the objective of reducing maternal and neonatal mortality by promoting institutional delivery among poor pregnant women. The scheme is under implementation in all states and Union Territories (UTs), with a special focus on Low Performing States (LPS). Janani Suraksha Yojana was launched in April 2005 by modifying the National Maternity Benefit Scheme (NMBS). When JSY was launched the financial assistance of Rs. 500/- , which was available uniformly throughout the country to BPL pregnant women under NMBS, was replaced by graded scale of assistance based on the categorization of States as well as whether beneficiary was from rural/urban area.
Weblink:
<http://nrhm.gov.in/nrhm-components/rmnch-a/maternal-health/janani-suraksha-yojana/background.html>
Accessed on 13 February 2016
- xlvi. **Bangarutalli** is a scheme implemented in AP and TS. It is meant to take care of the girl child in every household from her birth till she completes her graduation. If a woman gives birth to a baby girl, Rs 2,500 will be deposited into her account. Rs 1000 will be given for the first 2 years at the time of immunisation. Rs 1,500 will be given every year to the family through Anganwadis till the baby attains the age of 5 years from 3rd year onwards. At the time of admission to school, Rs 2,000 will be given every year for her studies from the first to the fifth standard, and Rs 2,500 from sixth to eighth standard, Rs 3,000 for ninth and tenth standard. For the girl's Intermediate study Rs 3,500 will be given, and Rs 4,000 a year during her graduation.
Weblink:
<http://bangarutalli.ap.gov.in/> Accessed on 13 February 2016
- xlix. **108 Ambulance Services:** On 2nd April, 2005 Government of Andhra Pradesh (before bifurcation) signed an MoU with GVK Emergency Management and Research Institute (EMRI) whereby GVK EMRI was appointed as a state level nodal agency to provide emergency response services across the state in Public Private Partnership (PPP) and in coordination with the public agencies. The 108 Emergency Response Service is a part of

the Andhra Pradesh Government's Rajiv Aarogyasri Health Scheme. The objective being to reduced mortality and have free emergency service accessible to everyone across the state.

Weblink: <http://www.aponline.gov.in/Portal/AP%20Govt%20Information/108.html>

Accessed on 13 February 2016

- I. **Janani Shishu Suraksha Karyakram (JSSK):** In view of the difficulty being faced by pregnant women and parents of sick newborn alongwith high out of pocket expenses incurred by them on delivery and treatment of sick newborns, Ministry of Health and Family Welfare (MoHFW) has taken a major initiative to evolve a consensus on the part of all States to provide completely free and cashless services to pregnant women including normal deliveries and caesarean operations and sick newborn (up to 30 days after birth) in Government health institutions in both rural and urban areas. In this context, Government of India has launched Janani Shishu Suraksha Karyakaram (JSSK) on 1st June, 2011.
- li. Weblink: <http://nrhm.gov.in/nrhm-components/rmnch-a/maternal-health/janani-shishu-suraksha-karyakram/background.html>
Accessed on 13 February 2016
- lii. The **DOTS** strategy along with the other components of the Stop TB strategy, implemented under the Revised National Tuberculosis Control Programme (RNTCP) in India, is a comprehensive package for TB control. The DOTS strategy is cost-effective and is today the international standard for TB control programmes.
- liii. **NTR Arogya Sewa/Vaidya Seva/Arogyashri :** Towards achievement of universal health coverage for BPL families whether defined in terms of financial protection or access to and effective use of health care, Government of Andhra Pradesh is implementing state sponsored Dr.Nandamuri Taraka Rama Rao Vaidya Seva Health Insurance Scheme (Dr NTR Vaidya Seva Health Insurance Scheme) also called Arogyashri Scheme in TS state. This scheme certainly counts to be one of the pioneers in terms of achieving equity and providing accountable and evidence-based good-quality health-care services in the state to assist poor families from catastrophic health expenditure. The aim of the Government is to provide Universal Health Coverage to BPL families. The scheme is a unique PPP model in the field of Health Insurance, tailor made to the health needs of poor patients and provides end-to-end cashless services for identified diseases under secondary and tertiary care through a network of service providers from Government and private sector.
Weblink:
<http://www.ntrvaidyaseva.ap.gov.in/vaidyaseva-scheme>
<http://www.aarogyasri.telangana.gov.in/>
Accessed on 13 February 2016
- liv. **Kalyana Lakshmi:** Widening its welfare agenda, the Telangana government has announced a novel scheme for the SC/ST girls – Kalyana Lakshmi. A one-time financial assistance of Rs 51,000 will be provided to the bride's family at the time of marriage to meet the marriage related expenses. A Telangana resident girl, over 18 years of age, belonging to SC or ST communities with a combined annual income of her parents not exceeding Rs 2 lakh is eligible for the Scheme. The Scheme became operational from 2 October, 2014.
Weblink: <http://www.telangana.gov.in/government-initiatives/kalyana-lakshmi>
Accessed on 13 February 2016
- iv. **Shaadi Mubarak:** Scheme benefits same as Kalyana Lakshmi but for Muslim girls.

- lvi. **Balika Samridhi Yojna:** The scheme of Balika Samridhi Yojana was launched by Govt. of India w.e.f. 15-8-97. Under BSY girl child is eligible for different amount of grants right from her birth to schooling till 10th standard.
- lvii. **Anna Amrutha Hastham (AAH) programme/ Arogya Lakshmi:** involves spot feeding of one full meal to pregnant and lactating women at the Anganwadi centre along with administration of Iron & Folic Acid (IFA) tablets. The programme was started on 01.01.2013 in ICDS Projects with most adverse health and nutrition indicators.
Weblink: <http://wcdsc.ap.nic.in/iahdetails.php>
http://wdcw.tg.nic.in/Arogya_Lakshmi.html
Accessed on 13 February 2016

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